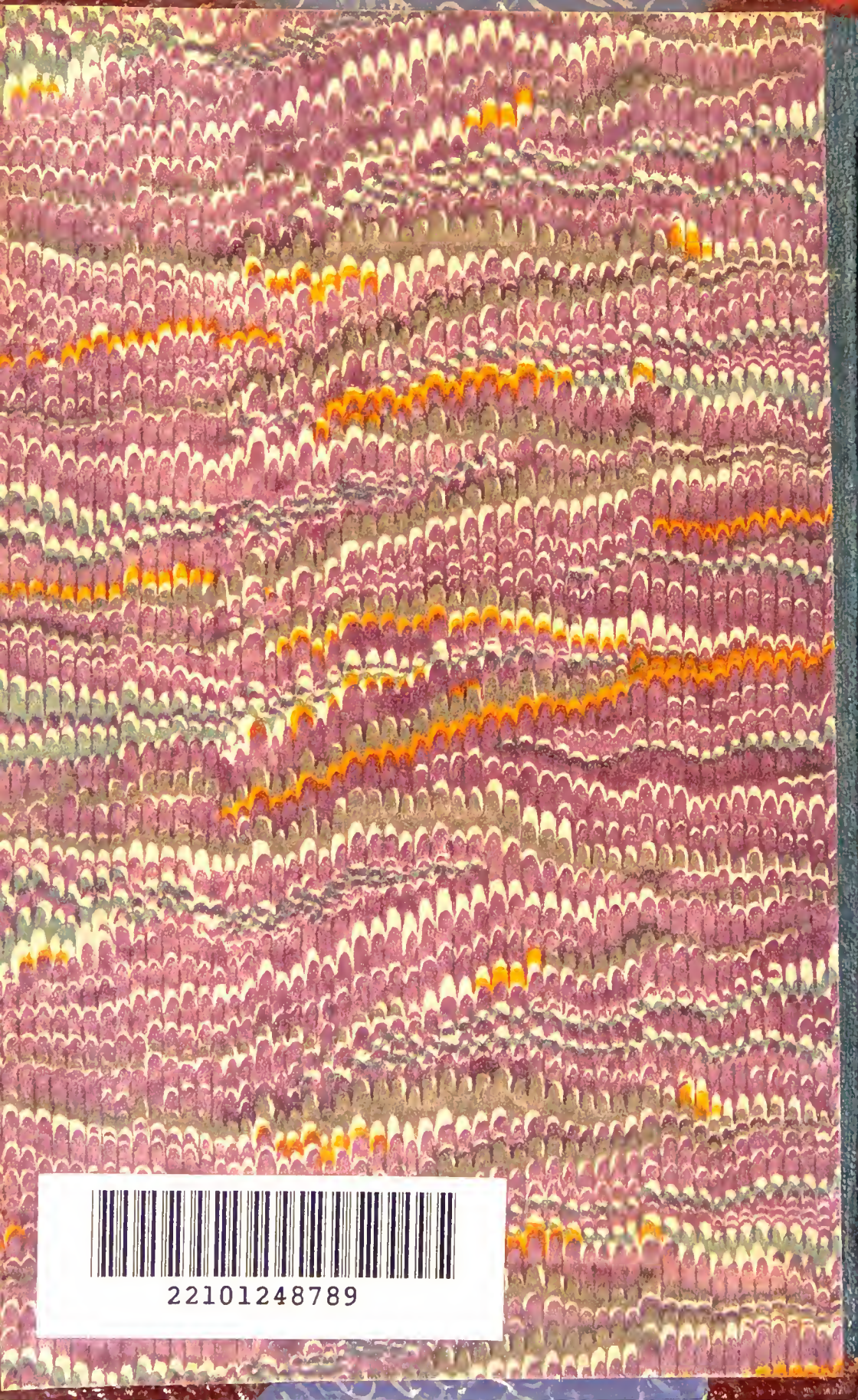

FISTULA, HÆMORRHOIDS,

PAINFUL ULCER,

STRICTURE, PROLAPSUS,

AND OTHER

DISEASES OF THE RECTUM

THEIR

DIAGNOSIS AND TREATMENT.

BY

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NOTICE TO THE SECOND EDITION.

The exceedingly favorable criticisms of the medical press, at home and abroad, and the rapid sale of this work, lead me to believe that in publishing it I supplied a want felt by many of my professional brethren.

I have endeavored to correct errors, and make this edition more useful without greatly increasing it in size; the additions relate chiefly to the questions of treatment.

10 Chandos Street, Cavendish Square,
December, 1872.

PREFACE TO THE FIRST EDITION.

THOROUGHLY well informed as the majority of general practitioners are on most professional subjects, rectal disease is one on which much uncertainty prevails.

It is not uncommon for me to hear gentlemen, who come to St. Mark's Hospital to see the practice, say they know next to nothing about diseases of the rectum. This is greatly to be deplored, as many of these maladies, in their earlier stages, are curable by very simple means, and often without recourse to any operation.

Though rectal operations are among the most satisfactory in the whole range of surgery, yet I think it must be conceded that to obviate by judicious treatment the necessity for an operation, is more meritorious than to perform it well when required.

As I most cordially indorse the opinion that "a big book is a big evil," I have endeavored to compress the matter in this volume into the smallest compass consistent with clearness.

I am perfectly aware that my composition is rough and often tautological, by I do not think my inability to write elegant English should absolve me from my duty. I have had for years unusual opportunities for observing diseases of the rectum, and I feel that I should not have usefully occupied my position if I failed to publish my experience for the benefit of my professional brethren.

It may be asked: Are there not enough books already written upon diseases of the rectum? Certainly there are many, and some very good ones, notably the works of the late Dr. Bushe, of America, the late Mr. Syme, Mr. Curling, Mr. Quain, Dr. Van Buren, of New York, and others; but I do not think these authors have said quite what I wished to say, and in some particulars their observations are not exactly in accord with my own.

It was a matter of considerable reflection to me as to whether I should have my book illustrated; but at last I determined not to do so. Pictorial illustrations of disease may often be compared to likenesses of people; if you are very well acquainted with the subject of the portrait, you may be able to say, "I think that must be meant for so and so;" but if you had only a slight knowledge of the person represented, you would altogether fail to recognize the portrait. Good photographs well colored might, no doubt, have helped my reader to an occasional diagnosis, but such luxuries are very costly, and one of my determinations was that my book should be published at a small price.

When I have related and commented upon the mistakes of others, I have endeavored to do so fairly and with a good intention, not in a spirit of fault-finding or self-sufficieney.

It has been my great aim throughout the volume to be as praetieal as possible, and to avoid all I eould the domain of theory; so that I think if any one after reading my book will pay a few visits to St. Mark's Hospital—and I ean say for my eolleagues as well as for myself, that all are heartily welcome—he will find that he has obtained a elear and applicable knowledge of a very prevalent class of disease.

10 Chandos Street, Cavendish Square,
London.

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DISEASES OF THE RECTUM.

CHAPTER I.

INTRODUCTORY.

Rectal diseases are the most eommon that affeet eivilized humanity. I have heard that they are rarely found in barbarous countries. Personally I know that the natives of South Africa, in their natural state, very seldom suffer. Why, it may be diffieult to say; but probably food and aleohol, sedentary indoor oecupation, and elothing, have much to do in eausing the prevalence of these maladies.

There ean be no doubt about one thing: they bring about a great deal of suffering, by whieh I mean not only pain, but also the distress arising from inability to work for daily bread. Both laborious and sedentary oceupations are often rendered almost unendurable.

It is also true that the majority of these affeetions are very amenable to proper treatment; the amount of benefit that can be eonferred by a well-skilled surgeon is really remarkable, but there is the converse proposition to be considered. When diseases of the rectum are neglected, or when the surgeon prescribes confection of senna and gall ointment in every case, cures do

not result, as there is very little "*vis medicatrix naturæ*" exercised here.

I remember an idle student once saying to me, that he did not see much good in diagnosis, as he had noticed in all the medical wards of his hospital that, whatever was the matter with the patient, he was pretty sure to get liquor ammoniæ acetatis ordered for him. There may be a minute grain of truth in this observation with regard to matters medical, but correct diagnosis in rectal diseases is all-important.

To prescribe for patients suffering from rectal maladies, without examining them both ocularly and digitally, is not only false delicacy but radically wrong, and likely to bring the treatment of these diseases into contempt.

Some time since I attended a lady from the North of England, who had painful ulcer and polypus of the rectum. She had been suffering for four years, and her health was much worn by the agony she had endured. All that time she had been under the care of her family medical attendant, she had taken quantities of medicine, and been prescribed both lotions and ointments, yet that gentleman she positively assured me had never made any examination of her, nor even remotely hinted that such a proceeding would be desirable.

Some forms of rectal disease are much more common than others, notably fistula and piles. The popular mind seems, indeed, only to admit of the existence of these two diseases of the bowel, for they call all of them by one or other of these names. Here is a table showing the relative proportions found in 4000 cases taken from my own practice.

Analysis of 4000 Consecutive Cases observed by Mr. Allingham, in the Out-patients Department of St. Mark's Hospital.

*Fistula,	1208
Abscess, 196 (of these 151 became fistulæ, the rest probably were cured),	45
Hæmorrhoids, internal,	863
" external,	102
Fissure or painful ulcer,	446
Syphilitic diseases of the anus and rectum,	348
Ulceration (neither malignant nor syphilitic),	190
Constipation,	185
Pruritus ani,	180
Stricture of the rectum (with and without ulceration),	178
Cancer of the rectum,	105
Procidentia,	53
Polypus (without fissure),	16
Hemorrhage (cause not ascertained),	15
Impaction of fæces,	14
Neuralgia,	12
Dysentery,	12
Spasmodic contraction of the sphincter (no fissure),	8
Proctitis,	7
Foreign bodies in the rectum,	5
Necrosis of bone (sacrum and tuberosity of the ischium),	4
Rodent ulcer,	2
Vicarious menstruation from the rectum,	2
	4000

There are certain questions which it is desirable to ask the patient when investigating a case of rectal disease, by which nothing is likely to be forgotten or overlooked.

* Of these cases of fistula there were 172 that presented more or less marked symptoms of affection of the lungs, viz., hæmoptysis, frequent cough, or want of resonance in some part of the chest.

It should be remembered that we have not done enough when we have discovered that a patient has such and such a malady; it is our duty then to find out if any other disease coexists. Thus, I often see a correct diagnosis made, as far as regards piles, but at the same time, a fissure or fistula, or ulceration, or even malignant disease of the bowel has escaped observation.

The following are the principal queries I generally put: Is there any pain? If so, of what character? Let the patient describe it—do not put leading questions. Does the pain exist always, or is it intermittent and paroxysmal? Is the pain set up or increased by defecation? Does it come on as the bowels are acting, or does it follow immediately or some time after the action? How long does the pain last? does it pass away entirely, only to recur on again going to stool? Does anything protrude on the bowels acting, or on making exertion—if so, does it bleed? Does it go back spontaneously, or has the patient to return it?

Is there any discharge? if so, what is its nature? is it of offensive odor? Is the patient constipated, or does he suffer from diarrhœa? What is the character of the fecal evacuation, as to size, form, &c.

Has the patient incontinence of wind or fæces? Is there any hereditary tendency to rectal disease? Does the patient cough much, or is there any proclivity to chest affections?

In women, inquire into the state of the uterus and its functions. After all this make an examination, the patient lying on a couch on the right side, in a good light, the knees being drawn up to the abdomen.

Externally, what is to be seen? Note any discoloration, the condition of the anus, patulous, contracted or nipple-shaped. Look for tumors, ulceration, or fistulous

orifices; feel around outside the anus with the forefinger for induration in any part; by this means the situation of an abscess or sinus may be discovered, and the condition of the sphincter as to spasm observed. Then administer an injection of warm water. I hold that no examination of the bowel can be considered complete if this is dispensed with. After the contents of the bowel are voided, you see what protrusion, if any, has taken place; remark its character in every way, particularly as to structure, vascularity, mode of origin from the bowel, by pedunele or otherwise; finally, examine the interior of the bowel with the finger. Never neglect this. The instructed and practiced finger passed into the rectum affords great information; to me generally all that is needed—internal fistulous orifices, polypi, minute ulcerations, fissures, &c., can all be easily detected. Sometimes valuable aid to diagnosis is obtained by the use of a speculum or rectoscope. I have had many varieties of the latter instrument constructed, to be used with or without artificial light; but none in my humble opinion are of any general or great utility. The ordinary plated metal speculum employed at St. Mark's Hospital is decidedly the best. It is open up one side and at the end, and has a well-fitting wooden plug; the whole is so shaped as to resemble as much as possible a forefinger. It is made by most instrument makers—Ferguson, Weiss, Krohne, and others. If you wish to explore the rectum very high up, a long glass tubular speculum, of small diameter, silvered inside and cut off obliquely at the end, answers every purpose. For this examination the patient may be placed in the prone position, with the hips well elevated upon hard pillows, to such an inclination that the intestines will gravitate towards the diaphragm, so that

when expiration takes place the rectum beeomes patulous, and you can see as far as the sigmoid flexure perfectly distinet. This mode of examination was suggested to me by Dr. Marion Sims, who some years ago did me the honor of attending my practice at St. Mark's Hospital.

Before using the speculum the bowel should be thoroughly clearcd out by an injection, and a piece of wool or sponge mounted on the end of a rod used to wipe away any diseharge.

It is quite possible in women, when under the influence of chloroform, to introduce the hand into the rectum, having first forcibly, but gradually dilated the sphincter.

I have aeeomplished this several times myself, and have deteeted stricture and malignant discase high up in the sigmoid flexure. In one case I was able to satisfy myself that the obstruction existed in the descending colon, and I therefore opened the ascending colon in the loin, after which operation the patient lived seven months in comparative comfort. In another ease I sueceeded in dilating with my finger a stricture about the sigmoid flexure, and saved the patient's life. I need not say that in this proceeding the greatest gentleness should be used, and that a small hand is very desirable. Dr. Heslop, of Birmingham, relates in the "Lancet," May 11th, 1872, two eases of death after passing the hand into the reetum, and, I think, justly infers that the operation was the cause of rupture of the bowel close to or above the stricture. My opinion is that in this operation the stricture should not be *forcibly* or *widely* dilated, and that the dilation should not be followed by eopious enemata, whieh will distend unduly the weak part of the intestine and cause much strain-

ing; it is better not even to give any purgative for at least forty-eight hours, and I think it wise to administer repeatedly small doses of opium. I do not think a grown person's hand could be introduced into the rectum of a man, but in the "Medico-Chirurgical Transactions" there is an account of a foreign body being removed by the hand introduced into the male bowel. I presume it is probable that a child's hand may have been employed.

CHAPTER II.

FISTULA IN ANO.

Fistula is the most common rectal disease affecting the adult. Out of 4000 cases taken consecutively and without selection, at St. Mark's Hospital, there were 1057 persons suffering from fistula, and 196 from abscess, of which 151 subsequently became fistulæ. Men are more subject to fistula than women.

This disease is most frequently met with during middle age, but it is by no means restricted to that period of life. I have operated upon an infant in arms, and upon a man seventy-eight years of age.

The causes of fistula, or abscess ending in fistula, are many and various, and several causes may combine to produce the result.

These generally may be specified: Injury to the anus, injury to the mucous membrane of the bowel by very costive motions, by straining at stool, by foreign bodies swallowed (fishbones, and the bones of rabbits, are occasionally found in rectal abscesses), exposure to wet and cold, and particularly sitting upon damp seats after exercise, when the parts are hot and perspiring;—I have traced many cases of rectal abscess to sitting on the outside of an omnibus shortly after active exertion—the scrofulous diathesis; and lastly, certain depraved conditions of the blood, such as frequently give rise to boils or carbuncles.

Fistula in children almost always results from worms, or injury to the anal region.

Fistula most usually commences by the formation of an abscess immediately beneath the skin just outside the anus; it is generally said to be in the ischio-rectal fossa, but I am certain this is the rarer situation; it may also begin by ulceration of the mucous membrane of the rectum, as seen in phthisical patients; when it arises in this manner fecal matter collects in the areolar tissue, and then an abscess will form and open outside; and, lastly, an abscess may form in the submucous connective tissue of the rectum, and then burst into the bowel. This is its ordinary termination; but it may insidiously undermine in any direction, and I am convinced that the most serious forms of fistula not uncommonly originate in this manner.

Rectal abscess may arise rapidly, when there will be redness, tenderness, and often very acute pain with constitutional disturbance; or it may be months in formation; and be perfectly painless even on manipulation; the only evidence of the abscess being a flat, boggy, crepitating enlargement, which can be felt at the side of the anus. This form of abscess is the most dangerous, as it is apt to be neglected; it has little tendency to open spontaneously, and it results in a burrowing up by the side of the rectum to some distance, as well as under the skin towards the perineum or buttock, or both.

I think, on the whole, by far the most usual course is for the abscess to form rapidly, with great pain, and if not interfered with to burst externally; the patient then becomes suddenly easy, and fancies that his trouble is over. After more or less time the cavity of

the abscess contracts, but rarely entirely closes, leaving a weeping sinus, with a pouting, papillary aperture, which may be situated near or far from the anus.

It is not often that one sees a rectal abscess very early; either the patient is not aware of the importance of attending to the early symptoms, or he temporizes, using fomentations or poultices; or even when seen by a surgeon, the proper treatment is not always promptly adopted. I saw a case some time ago, with my friend Dr. Brodie Sewell, in which, under the direction of a medical man, iodine paint had been applied to a large abscess. It is well to remember, that as soon as pus is formed, there is only one method of treatment to be for a moment entertained, and that is *incision*. I am sure it is much better to cut into an inflamed swelling near the anus, where no matter is, than to let a day pass over when suppuration has commenced; the longer the abscess is left unopened, the more danger there is of lateral sinuses forming. Before any pus exists, rest, warm fomentations, and leeches may cut short the attack, but very rarely. As in most things there is a right and wrong way of proceeding, so is there in the mode of opening an abscess near the rectum. I do not say that mine is absolutely the best method, but this is how I proceed: Lay the patient on the side on which the swelling exists; pass the forefinger of the left hand, well anointed, gently into the bowel; then place the thumb of the same hand below the swelling on the skin. Now make outward pressure with your finger in the bowel, and you render the swelling quite tense and defined, it being, in fact, taken between your finger and thumb. A curved bistoury can then be thrust well into the abscess, and made to cut its way out towards the anus, in the axis of the bowel; the

incision should not be made from coccyx to perinæum, or the matter will not all escape; it is well to make a thoroughly free incision, commencing at the outermost part of the swelling. All this may appear very simple, and scarcely worth writing about, but operating in the way I have described you will never have to cut twice. The incision is made very rapidly, and you have such command over the patient that he cannot get away, which he may try to do just as you enter the knife, and so frustrate your intentions. If the part be thoroughly frozen by the ether spray, this operation, otherwise exquisitely painful, may be rendered almost, if not quite painless.

If an abscess is opened freely and early very often a fistula may be avoided. After the incision place a small piece of cotton-wool between the edges of the wound (let it remain for not more than twenty-four hours), and put on a poultice. To give your patient the best possible chance of recovery, keep him on the sofa for a few days. I always think it advisable to clear out the bowels once, and then confine them by an astringent dose of opium for three days; you thus secure entire rest to the parts, and give every opportunity for the cavity of the abscess to fill up. After a time a little stimulating lotion may be used with a syringe, as sulphate of zinc, copper, nitric acid, or preparations of iron. I often apply friar's balsam with a camel-hair pencil, and find it a most excellent remedy. Under this sort of treatment I have frequently got an abscess to fill up, and thus avoided a fistula. You must not ram a quantity of wool or lint into the cavity of the abscess, as I have often seen done; if you do, it will certainly not heal.

The question naturally arises, Why do these abscesses

not close up? Why do they form sinuses? There are doubtless several reasons, but these may be sufficient. The mobility of the parts caused by action of the bowels and movement of the sphincter muscles; and the presence of much loose areolar tissue and fat. The vessels near the rectum are not well supported, and the veins have no valves; therefore there is tendency to stasis, and this is inimical to rapid granulation. We know that abscesses are always apt to degenerate into sinuses when situated in any lax areolar tissue, as in the axilla, neck, or groin.

It is stated that when rectal abscesses are opened the pus is very fetid; this is not my experience. I think that when the pus is *very* fetid there is a small valvular internal opening, and that thin fecal matter has passed into the connective tissues and set up decomposition and formation of noxious smelling gases.

After an abscess has long existed the discharge loses its purulent character; it becomes watery; the abscess has gradually contracted, and now only a sinus, very often formed of dense tissue, remains. If this sinus is laid open you may observe that its interior resembles in appearance the inner coat of an artery, so smooth has it become. This was formerly called a pyogenic membrane; it certainly secretes pus, but it is not a membrane.

If now a probe be passed very tenderly into this sinus, allowing it to follow its own course, and after this is done the finger be placed in the rectum, you will probably find that the probe has traversed the sinus, passed through the internal opening, and can be felt in the bowel. In this case you would have an ordinary simple COMPLETE fistula; and this is by far the most common variety, very few fistulæ that have existed for

more than three months being without an internal opening.

Besides this common form there are two other descriptions of fistula, viz., the blind external fistula, and the blind internal fistula. In the blind external fistula there is an *external* opening, and so it is called an *external* fistula, but no *internal* opening, hence "a BLIND *external*." In the other variety there is an *internal* opening, so it is an *internal* fistula, and there is no *external* opening, so it must be called a BLIND *internal* fistula.

I have so often seen confusion in the use of these terms that I have been particular in describing them; and considered in the way I have put it I think there can be no misconception.

The blind internal form of fistula results usually from some injury to, or ulceration of, the lining membrane of the rectum, or abscess in the connective tissue beneath the mucous membrane, and is most commonly found in subjects who have consumption, or who are predisposed to it.

We will now imagine that you have a fistulous patient before you. Proceed to examine him thus: Place him upon a hard couch on the side upon which the disease is supposed to be situated, the buttocks being brought close to the edge, and the knees drawn up. Look at the anus and the surrounding parts *carefully* to detect any visible malady. You may see the orifice of a sinus, or some discoloration of the skin may show you the site of the disease. Then feel gently all round the anus with the forefinger, and you will often, by the induration, detect the course and position of the sinus, which feels like a pipe beneath the skin. Having satisfied yourself in these respects, then pass the probe

into the external aperture (if any exists); hold the probe with a very light hand, and let it almost find its own way. In many cases, as I have before said, it will pass right into the bowel; when the probe has been passed as far as it will go without using any force, introduce the forefinger of the left or right hand, whichever according to the position of the patient is most convenient, into the rectum (do not, as is often done, introduce your finger before the probe; if you do, you will excite contraction of the sphincter, and the sinus will be drawn up or contorted, and consequently the probe will not pass). When the finger is in the bowel, if the probe has not come through the internal orifice, feel for the opening—an educated digit will nearly always detect it; and having found the opening, you can with the other hand guide the probe towards it.

The internal aperture is usually situated just within the anus, in the depression which exists between the external and internal sphincters. I do not say that it is by any means invariably so, but I am sure that it commonly is so, and one reason why the opening is not felt when the finger is inserted into the bowel is because the search for it is made too high up the bowel.

I think the reason the internal opening is situated where I have said is this. The abscess forming, in most cases, just outside the anus, does not burrow deeply, but passes close under the external sphincter; it then is prevented ascending higher up the bowel by the thick band of the *internal* sphincter, and consequently is turned inwards, and makes its way through the lax areolar tissue, in the space between the two muscles. When the abscess really commences in the ischio-rectal fossa, it burrows deeply, and then most

usually passes beneath the internal sphincter, and opens, if at all, high up in the rectum.

Occasionally more than one internal opening exists, and I have seen several times what the late Mr. Syme declared could not occur, viz., two internal openings in the same patient at the same time; I recently had such a case at St. Mark's, there was an internal aperture at each side of the bowel.

It is all-important that this internal aperture be felt with the finger (so that in operating it may be included in your incision), for not unfrequently from the tortuous nature of the fistula the probe cannot readily be got through it; this is markedly the case in the horseshoe form of fistula, which is very common. The sinus here runs round—generally dorsally—from one side of the anus to the other, so that the external and internal openings are placed on opposite sides of the bowel. This variety, if not properly diagnosed, is rarely cured by operation, the sinus being laid open on one side of the bowel, and left untouched on the other; this mistake may often be avoided by a careful examination with the finger externally, as you can feel a hardness on *both* sides of the anus, the patient will also sometimes assist you by telling you that he has felt something like a "piece of wire" on both sides of the bowel.

When you pass your finger into the bowel to search for the internal opening, never forget to carry it higher up to see if the rectum be generally otherwise healthy; you may find stricture, ulceration, or malignant disease coexistent; without this precaution these conditions may be overlooked.

A fistula may be a very trivial matter indeed, which you can operate upon in the out-patients' room, and send your patient home afterwards, or it may be a

really serious affair, demanding extensive surgical interference. I have often seen a buttock so riddled with sinuses as to more resemble a rabbit warren than anything else.

Fistula may exist for years without causing much pain or inconvenience to the patient. I have met with many persons who have had rectal sinuses for ten years and upwards, and never had anything more done than the occasional passing of a probe when the external aperture got blocked up, and pain was caused by the formation and retention of matter.

When the tissues around the sinus become very dense there may be, for a long period, an arrest of burrowing, but an attack of inflammation set up at any time will cause a fresh abscess.

When thinking whether you can safely leave a fistula for a time, the form of it is an important element for consideration. The blind external is the safest to leave. An internal fistula with a large internal opening, and the sinus running from it towards the anus, is sure to burrow, because, being funnel-shaped, with the larger end of the funnel upwards, fæces readily pass into it, and inflammation, much pain, and extension of the disease will certainly ensue.

Usually it may be said the longer a fistula is left the more does it burrow, and the more difficult is it of cure; therefore I think it unwise to tell a person to have nothing done as long as he is not suffering, which I frequently hear is the advice given to patients. I am often anxiously asked by sufferers if a fistula can be cured without an operation, or as they say, "the use of the knife." They frequently see in the papers, books advertised by individuals who pretend to cure fistula and other diseases of the rectum, without cut-

ting or laying up. To this I reply that I have seen fistulæ get well spontaneously, without any treatment more curative than an occasional laxative, and the use of zinc ointment; and, further, that I have been successful in curing some cases of blind external fistula without any operation; but, on the other hand, I have been more frequently disappointed in my attempt, even when the case looked favorable.

In very nervous people, who will not submit to an operation, and also in phthisical patients, I think it quite permissible to attempt the cure without cutting. In the latter case, especially, I have frequently got fistulæ well, without laying them open with the knife; the sinus often runs just under the skin and mucous membrane, and here a seton of silk may be passed through, and allowed to cut its way out. This only answers where there is but thin and deteriorated integument to deal with; if the wall of the sinus is thick, the seton only lights up fresh inflammation, and causes an augmentation of the original disease.

If you consult the works written by pretenders to cure fistula without "operation or confinement from business," you will find that they do not tell you what their method of treatment is. They only relate a great number of wonderful cases, and say, "I applied my *dressing* or *peculiar treatment* to the fistula, and it got rapidly well;" they never tell you what the dressing is. Most usually they attempt to cure the sinus by passing a seton through it, after the manner devised many years ago by Mr. Luke, and recommended by him in peculiar cases only, which will be referred to further on. I know this from having had patients come from these practitioners with the thread in their fistulæ. The truth is, that the whole matter is a delusion, the

cases are very few and far between that can be cured without operation, and the seton is usually more painful and infinitely more dangerous than the knife. I saw a gentleman some time ago who had been under the treatment of one of these advertising quacks for a considerable period, and had paid him more than one hundred guineas under the *promise* of a cure; but he suffered a martyrdom, and got worse instead of better, and after a time he always found his surgical friend was out when he called, and he could rarely get to see him, so that he lost his money as well as his health, not having time or disposition to prosecute the swindler. In this case there were several sinuses which I suspect had been caused mainly by the irritating and painful applications that had been made to the original fistula.

I will here relate a few cases of spontaneous cure, and also some in which I have been successful in getting fistula to heal without a cutting operation.

Spontaneous cure of a blind external fistula.—Wm. B—, æt. 49, a draper's assistant, admitted into St. Mark's, August 30th, 1864. Had an abscess five months ago by the side of the anus, which was opened, and ever since there has been a discharge from it; at times it is very sore and swells, then it breaks and discharges again, and he is quite comfortable. On examination a blind external fistula was found, the orifice being close to the external edge of the sphincter; the sinus ran up quite an inch, and did not approach near to the mucous membrane. I was quite sure, from a most careful examination, that no internal aperture existed.

No treatment was adopted, as I intended to take

him in when there was a vacant bed. He only had a little calomel ointment ordered, and a pill to keep the bowels acting. In three weeks he told me the sinus had healed, and on examination I found it to be so; of course I expected it to break out again, but it did not.

October 11th. It remains soundly healed, and the hardness is just disappearing.

December 20th. The fistula remains quite well; there is no evidence now of where it was, no mark of the original aperture, and no induration. My opinion is that the probing in this case was just sufficient to set up granulation and rapid closure of the sinus. It did not return I am sure, as the man would certainly have come again to me, being so delighted with the result of what he considered my skilful treatment.

Blind external fistula; spontaneous cure.—J. C—, æt. 46, a porter at the Tilbury Station; admitted into St. Mark's, May, 1857. Steady man; suffers from ague. Six months ago had a rectal abscess, which burst and has continued to discharge more or less up to the present time. A sinus was found running some distance up by the bowel, rather deeply situated, and not communicating. I wished to take him in, but he said he could not lay up yet. Ordered a mild aperient, and some zinc ointment. In a fortnight he came again and said the fistula had healed. I examined him and found it closed; moreover it was not tender.

June 7th. Again examined; found it still well; no pain; very little hardness; no discharge from the bowel; and I explored the rectum to see if it could have opened internally, but this was not the case.

July. Saw him again, and he was quite well, and he

has continued so. I recently heard of him, and he has never had any return of his malady.

Blind external fistula; spontaneous cure.—Jas. L—, æt. 65, came to St. Mark's, July 5th, 1864. The external aperture was some distance from the anus; the sinus passed up beyond the external sphincter, and the probe could be felt rather near the mucous membrane. No particular treatment. The probe was passed again in about a fortnight after he was first seen. The sinus healed up while he was waiting his turn to come in. I kept him under observation until the end of December, when, finding no return of the fistula, no pain, no discharge, no internal opening, no hardness in the old track of the sinus, I discharged him as cured.

Complete fistula in ano; spontaneous cure.—W. H. K—, æt. 30, clerk; admitted into St. Mark's, April 2d, 1867. Not very strong; habits regular. On examination a small but complete fistula was found on the right side of the anus, the external opening being quite an inch from it, the internal aperture in the usual place between the two sphincters. In the middle of May I took him in as an indoor patient, and on going to operate I found the external orifice so firmly closed that I could not without unwarrantable force get a probe into it; I could feel the internal aperture very small. There was no pain, so I left him. Next week I again examined him and found the internal orifice also closed. I kept him in the hospital another week, and still the fistula remained healed, so I put him upon the out-patient list, and he attended up to the end of August, when finding the fistula still closed, there being no pain and no induration, I discharged him as cured, requesting

him to come again immediately on any return of pain or swelling. I have not seen him since.

A schoolmaster was sent me early this year from the country to be operated upon for fistula. On examination I found a sinus commencing about an inch from the anal aperture, and running up rather deeply, but not apparently approaching near the mucous membrane of the bowel. I could not find any internal orifice, nor could I inject any fluid through the sinus into the gut, so I think I was warranted in inferring that the fistula was a blind external one; it had existed about four months, and came after the usual symptoms of an acute abscess, and it now discharged a little daily. I advised an operation, and the gentleman went away to make his arrangements for coming to London in a week or so; but he wrote me in a fortnight to say the place had healed up. I saw him a short time since, and all trace of the sinus and all hardness had gone. I had injected him with a weak solution of iodine in making my examination, in order that if any of the fluid passed into the bowel it would betray its presence by staining my finger. Was it the iodine which healed up the sinus? I relate it as a spontaneous cure.

I have notes of ten more cases, but they differ in no essential particular from those already related.

All the cases of fistula cured by me without a cutting operation have occurred in private practice; the reason is that time is generally a great consideration to the poor man; he does not mind a little pain; he wants to be cured as quick as possible, and therefore prefers to be operated upon at once, in order to get well speedily. It is only the rich who can afford the luxury of

three or four months' treatment, and perhaps at the end of that time be no nearer well than at first. Altogether I find that I have had thirteen successful cases, and nearly twice that number in which I have failed to effect a cure after a prolonged attempt, so I cannot say the prospect is very encouraging; but still I think there is something more to be done in that way, and I am now working out a new mode of treatment, but cannot report upon the result yet.

I will only relate a few illustrative cases.

A middle-aged gentleman, connected with a wholesale druggist's, called upon me in the year 1864, having a fistula of the blind external variety. The opening was more than an inch from the anus; the sinus ran up about an inch and a half, and came rather near the bowel. I advised an operation, but he said he had made up his mind not to submit to any cutting if it could possibly be avoided, as a friend of his had been operated upon by an eminent surgeon and had lost the power of holding his motions in consequence of what was done. It was in vain that I assured him he need fear no such calamity—he only begged me to try "milder means." So I consented, after explaining to him the great probability of failure. I cleared out his bowels with a purge, and then injected the sinus with the compound tincture of iodine, squeezed it out again, and sealed up the external orifice with collodion and wool; I kept him in bed for three days, and also confined his bowels. He had little or no pain after the injection. On the fourth day I took off the wool, and to my astonishment found the sinus nearly closed: only one little bead of pus could I squeeze out. Encouraged, I still kept his bowels from acting, and with a very small camel-hair

brush put a little more iodine into the aperture of the sinus, again sealing it up with the collodion and wool. At the end of the week I gave him a purge, and then examined him, when I found that the fistula was quite closed up. For another week I kept him lying on the sofa: after that he went about as usual; and I can say, as I have seen him recently, he remains well to this day.

A chemist put himself under my care at the suggestion of my drug-merchant friend. He had a complete fistula, not of any extent, but it gave him some trouble, and he would willingly have been operated upon, but he thought himself of hemorrhagic diathesis, having on one occasion bled profusely, and for days, after the extraction of a tooth. I told him I would attempt to cure him, but had very small hope of success, so I injected compound tincture of iodine. Previous to doing this, I did not think the fistula was a complete one, but when I passed my finger into the bowel to squeeze out all the iodine from the sinus, it was stained by the fluid going through into the gut. The injection did not succeed; I then speedily cut through the fistula with the ligature and screw tourniquet, and he got well without any hemorrhage.

Mr. W. H—, æt. 26, a decidedly phthisical patient, has had hæmoptysis several times, and is thin and hectic. He has had fistula for twelve months: it discharges much, and is constantly inflaming and causing him great suffering. I found that it was a complete fistula, running rather close under the skin and mucous membrane, and having a large internal opening. I should have operated with the knife, but the patient

had the greatest objection, so I proposed the ligature and screw tourniquet. To this he assented, and, without any trouble, in four days I cut through the wall of the sinus, and thus relieved him. I then sent him away to Guernsey, and he returned after two months much better, but the wound had not healed, there being overlapping flaps of skin. These I persuaded him to let me freeze and remove with scissors; the result was that he did very well indeed, cicatrization soon taking place. His health was very manifestly improved by the operation.

An Independent minister, a very timid man, who came to me with fistula of a simple kind, wished me very much to try to cure him without operation; and as I thought it a very favorable case I tried for three months, but without any success. I used iodine, tartrate of iron, persulphate of iron, chloride of zinc, tannic acid, and glycerin, also carbolic acid, and many other remedies.

An old gentleman, upwards of 70, had a fistula, blind external in its character. He thought himself too old for an operation, and wished me to try to get it to heal without cutting him. The external orifice was some distance from the anus. After a good many attempts I succeeded in getting the sinus to close by injecting a solution of persulphate of iron in glycerin. After each injection I kept his bowels confined for five or six days, and also made him lie on a sofa.

To the above I can add two slight cases cured by injecting friar's balsam.

I do not think anything would be gained by relating

more cases. One practical point I would mention. The further the external aperture is from the sphincter, the more likelihood is there that the sinus may heal. This is shown as well in the cases of spontaneous cure as in my own successes. It is very important in these attempts not to do any harm. You must always enjoin rest after the injection, and watch that not too much inflammation is set up. The most dangerous injection, in my experience, is that which has been most frequently employed, viz., nitrate of silver.

Before proceeding to operate upon a case of fistula it is highly important that the bowels should be well cleared out, and I prefer, when I can, to administer a purge three days prior to operating, and again the night before.

The patient should be placed upon a hard mattress on the side on which the fistula exists, the buttocks being brought quite to the edge, or rather overhanging the edge of the couch, and the knees well drawn up to the abdomen. I have no hesitation in saying this position for all rectal operations is vastly the most convenient both for the surgeon and the patient. Now, take a Brodie's probe-director made of steel, with a *small* probe point; oil it, and pass it into the external opening through the sinus and the internal opening, if possible; then insert your finger into the rectum, and on feeling the point of the director in the bowel tell the patient to strain down, you will then very easily be able to turn the point out of the anus. This done, with a curved bistoury divide the tissues bridged over the director.

If there be no internal opening you will almost always find some part where only mucous membrane intervenes between the point of the probe and your

finger. At this spot work the director through, and bring down the point as before. You must not rashly thrust the point of the probe through the mucous membrane or you will wound your own finger; this may always be avoided by a little gentle and patient manipulation, even when the tissues are indurated. When you have divided the fistula from the external to the internal opening, search higher with the probe for any sinus running up beyond the internal opening; if this exists you should lay it open.

I know many authorities have stated that it is only neeessary to incise the fistula between its external and internal openings, and that the sinus above the internal opening will spontaneously close; my experience is most decidedly opposed to this statement.

In the great majority of cases you will not cure your patient unless you lay the whole sinus open from end to end. Over and over again I have left the sinus above the internal opening uninterfered with, and almost invariably have had to regret it and perform a second operation. It eonstantly oceurs to me at St. Mark's to have cases which have been operated upon at other hospitals, and the upper part of the sinus left, and the patient is not cured; fresh or continued burrowing takes place from the upper track, and a second operation, often more severe than the first, is rendered necessary. I need searcely say that in private practice this is very damaging to the surgeon's reputation.

Having then opened the fistula in its whole upward length, search for lateral sinuses extending from the outer opening; also see if there be any burrowing outwards beyond the outer opening. A fistulous orifice is often not at either end of the sinus, but somewhere in its eourse. Be eareful to see if, from the track of

the main sinus, no other runs deeper beneath it. Frequently, in fact nearly always in old-standing cases, this deeper sinus does exist, and unless it is incised with the rest the patient will not get well.

Here, again, some surgeons have said it is unnecessary to divide any but the principal sinus, and the rest will heal. On this point I can speak most strongly. I am certain you can never guarantee the healing of a fistula as long as any lateral or deep sinuses remain; and so long as they do remain, *fresh* sinuses will form. I speak with the utmost confidence that it is better, in the large majority of instances, to err on the side of doing too much than too little. Very extensive incisions, *if properly treated afterwards*, will heal with astonishing rapidity and certainty when all the sinuses are slit up, but limited incisions will not heal as long as any lateral or deep fistula exists. As a rule, it is the best practice to lay open the original sinus first and the tributary ones after.

It is impossible in any work to lay down more than general rules; every case will call more or less upon the surgeon's knowledge, dexterity, and prudence; but in thus strongly expressing my opinion, contrary to the dicta of many eminent men, I can only say that I am stating what I see every day to be the truth.

When all the sinuses are slit up, with a pair of scissors take off a portion of the *overlapping* edges of skin; they are often thin and livid, having very little vitality. If not removed, they will fall down into the wound, and materially retard the healing process. I have frequently induced healing in a fistulous track, which had only been laid open, by paring off the edges of the skin which were undermined. It must be observed that I am not advocating "the cutting out of a fistula," as it

nsed to be called; I am only recommending the removal of any overhanging, undermined, degenerate skin. When several sinuses have to be laid open I am in the habit of carefully preserving islets of skin, from the edges of which granulations will take place, and by which cicatrization is materially hastened. In old-standing cases, where there is much induration, it is very good practice to draw a straight knife through the dense track of the fistula, and outwards beyond the external opening; it is wonderful after this how rapidly quite cartilaginous hardness passes away. This incision was commonly practiced by the late Mr. Salmon. He called it his "back cut," and although if carried to excess incontinence of fæces may result, I have no hesitation in saying that Mr. Salmon cured many cases by this means where other surgeons had failed.

Having completed your operation, take some finely carded cotton-wool, and with a probe place it well into the bottom of the wound, packing it into every part, and being the more particular about this if your incisions have been extensive or pass high up the bowel, or if the parts are very dense and gristly (as they are in old fistulæ, and especially in cases operated upon for the second time). A good firm pad of wool should then be placed between the buttocks over the wounds, and a T-bandage firmly applied. With these precautions you need never fear hemorrhage; for if the bleeding be thus arrested by pressure at first, all will be well; if, however, the wool be carelessly stuffed into the bowel without method, it is not placed evenly at the bottom of the wound, and then, as soon as the patient rallies from the shock of the operation, bleeding will recommence, and both the patient and the surgeon will be

put to much annoyance, and probably some anxiety. Of course, if you see a large vessel pumping at the bottom of a wound, it is good practice to close it by torsion; but when the track of the fistula is very callous you cannot twist the vessel, and a ligature may then be applied. By careful attention to the details I have given a sinus may be opened to any possible distance up the bowel, or in any direction or depth, without the slightest danger. I can most truthfully say that I have never had a case of primary hemorrhage that has given me any real concern.

If the rectal sinus runs up so high and the parts are so dense that you cannot get the point of your probe director out of the anus, the safest and easiest way of operating is with the spring scissors and special director designed by me, and made by Ferguson, of Giltspur Street; with this instrument you can divide fistulæ high up the bowel, however dense they may be, with great facility and quickness. The director is made with a deep groove, the section of which is more than three-quarters of a circle; in this the globe-shaped probe-point of one blade of the scissors runs. Once placed in the groove it cannot slip out; so, having passed your director through the sinus, you introduce the forefinger of your left hand into the bowel, then insert the probe-pointed blade of the scissors into the groove in the director, and run it along, cutting as you go, the finger in the bowel preventing the healthy structures from being wounded. By this instrument operations usually very difficult, and in which you are very apt to break your knife, are rendered quite simple. A country hospital surgeon told me the other day that after seeing my description of this instrument he procured one, and uses it *in all* his cases of fistula; he says it is "operating

made easy." I have not said a word about the old method of operating, usually described in works on surgery, because I consider the mode I have detailed so much more satisfactory and practicable.

It was in cases of sinuses running high up in the rectum, or where stricture existed in conjunction with fistula (the internal aperture opening *above* the stricture) that Mr. Luke, in the year 1845, recommended cutting through the diseased structures by means of a fine piece of strong twine and a screw-tourniquet. It is by no means an operation easy of performance, but this is the way in which it is done, and it is, no doubt, very well adapted to some cases. Introduce a hollow probe through the sinus and into the bowel, then pass a piece of thin wire through it, hook the end down and bring it out at the anus; then withdraw your probe, fasten the twine to one end of the wire and draw on the other end; by this means you get the twine to traverse the sinus, one end coming out at the anus, and the other at the external opening of the fistula; attach the twine now to your tourniquet, and screw up a little every day or two. In this way you may cut through very dense structures without any great danger; but it is often painful, and you are apt to set up inflammation and suppuration, and so may get fresh abscesses. I have had this occur in my own practice, and also seen it in that of my colleagues.

Sometimes, in a complete fistula, you have wind pass through it, and also fæces when the bowels are relaxed; but, as a rule, this does not occur, either in consequence of the smallness of the internal aperture, its situation, or its being valvular. Though, therefore, the passage of wind must be a certain evidence of a complete fistula,

the absence of this sign should not induce the belief that there is no internal opening.

The most painful form of fistula, at the same time, fortunately, the most uncommon, is the blind internal. I have seen many cases where the aperture was as large in circumference as a threepenny piece; then the fæces, especially when liquid, pass into the sinus and create great suffering—a burning pain often lasting all day, after the bowels have acted. Moreover, these fistulæ are frequently severe in consequence of the burrowing caused by the irritating matters which get into them.

In operating upon a blind internal fistula, if you can feel, by the hardness externally, the site of the abscess, you may plunge your knife into it, and thus make a complete fistula, through which, of course, you pass your director. If you cannot feel any hardness, or see any discoloration to guide you to the situation of the sac of the abscess, the best way of proceeding is to bend a silver probe director into the form of a hook, and then hook this into the internal aperture, and bring the point down close under the skin; when you cut upon it, thrust it through and complete the operation.

This requires a little dexterity and some practice to manage well, but it is by far the most sure way of not missing the sinus. These cases of blind internal fistula are very often not understood, and consequently are mistaken for other diseases. Not infrequently internal fistula is connected with hæmorrhoids. I have seen many such cases. I think when strong applications are made to hæmorrhoids, suppuration may be set up, and then an internal fistula forms. Here is a case probably of that kind:

Mary F—, æt. 33, admitted into St. Mark's, March,

1865. She suffered from hæmorrhoids, which prolapsed on going to stool, and she had been accustomed to apply gall and tar ointment to them freely. She had pain on and after an evacuation, and also a discharge of matter. No external disease was apparent; no fissure could be detected, but on passing my finger into the bowel I felt, about an inch and a half from the anus, a small opening; on introducing a speculum I saw this orifice, and passed a probe into it some little distance up the bowel; it also ran down towards the anus. I laid these sinuses open upwards and downwards, and then ligatured the three hæmorrhoids. She was operated on upon 30th March, and left the hospital quite well on the 30th of April.

These cases of *blind internal fistula* are instructive, so I will relate some more:

Chas. E. S—, was admitted into St. Mark's, July 13th, 1870. He had been operated upon in St. Thomas's Hospital, for fistula, and it appeared to have healed up and he was discharged, but the man still had pain on and after defecation, and a discharge of matter. Externally the scar of the wound was visible, but no opening; in the bowel was an aperture, and from this ran up a sinus quite two inches; it passed downwards also beneath the old cicatrix as well as laterally towards the perinæum. I slit up all these sinuses freely, and also removed the edges of the wound, which were very dense at the site of the old scar. The man went out quite well in five weeks.

I saw, with my friend Mr. T. Carr Jackson, a professional brother who had been suffering for some time

from pain on defecation, and burning afterwards, with discharge of matter always upon the motions; he was also much troubled with his water, having considerable irritation of the bladder. He had been operated upon, but without getting better; there was no ulceration, nor was there any fissure. On examining this gentleman I at once found what I expected, a small internal aperture about two inches from the anus; from this a sinus ran upwards and downwards. The anus (with its outside surroundings) was perfectly healthy. Mr. Jackson, assisted by me, at once slit up the sinuses, and the patient was rapidly and permanently cured; all his bladder symptoms likewise vanished.

Wm. R—, æt. 40, admitted into St. Mark's, May 16th, 1867. Had been operated upon at St. Bartholomew's for fissure; the wound healed, but still he suffered pain, and had a discharge of pus. On examining him I found at the upper end of the scar of the fissure a small orifice; into this a probe passed up the bowel close beneath the mucous membrane. I opened it, and cut through the old wound, and in ten days he was quite well.

I could multiply these cases to almost any number. I have taken them without selection from my case books. I will quote one more only:

A healthy hard-working solicitor came to me from the country; he said that for more than a year he had had something the matter with his rectum, and he had been treated by several surgeons for piles and fissure, but without benefit. He had a good deal of discharge of matter and pain after stool. On examination there

was nothing to see outside; the anus was perfectly healthy, but carefully feeling round it I discovered a small, hard, crepitating spot towards the perinæum. On examining the bowel internally I found over the sacrum, and fully two inches from the anus, a distinct orifice, round and rather hard; into this I could get a probe. He was very much astonished when I told him that he had a fistula, for no one had suggested such a thing. He came to London, and, assisted by Mr. T. Carr Jackson, I operated upon him; a most extensive case it was, as that gentleman can vouch for; the sinus ran all round from the dorsal part of the rectum to the perinæum, and as far forward as the scrotum; there were also lateral sinuses requiring incision, but I never had a patient do better; the very large wounds healed without any trouble. There was no incontinence of fæces, although both the internal and external sphincters had been most freely divided, and the patient went home well in about seven weeks.

Internal fistula, as I have already said, may commence by an ulceration of the mucous membrane; or perhaps more rarely, by a small abscess forming in the submucous areolar tissue; this may be the result of wounding or bruising by hardened fæces or foreign bodies swallowed. Of this I have recently had two excellent examples, one in the practice of Dr. Cottew, of Hornsey; and the other in that of Mr. Kelson Wright, of Brixton. Here two ladies complained of considerable pain in the rectum. On examination in each case a rounded hard swelling was felt about an inch from the verge of the anus. On more carefully investigating, a very small orifice was found running into this swelling. In both instances foreign bodies,

i. e., fish-bones had been felt by the medical attendants before I saw the patients.

I am decidedly of opinion that when internal fistula commences by ulceration it is most frequently found associated with phthisis. I shall not go into this important question here, intending to devote the next chapter to the special consideration of this subject.

In operating upon women suffering from fistulæ (especially when the sinus is near the perinæum), cut as little as possible, for anything like too free incisions are apt to end in incontinence of fæces, or, at all events, in such partial loss of power in the sphincter as to prevent the patient retaining flatus, which I need scarcely say is a most disagreeable result to an operation. I have been several times consulted by ladies on account of this condition, and in two cases I was successful by an operation in restoring the lost power much to my patients' delight.

After the operation for fistula the bowels should be kept confined for three days; a mild purge may then be administered, and full diet allowed. The wool usually comes out on the bowels acting, but if it does not come away I gently and gradually remove it.

If much wool has been put into the rectum to prevent hemorrhage I generally remove a portion of it the next day, only leaving some at the bottom of the wound. If the whole plug is left in, the patient will probably be very uncomfortable, as he cannot easily get rid of wind, and the danger of primary hemorrhage being over in twenty-four hours there is nothing gained by retaining a bulk of wool in the bowel.

Very little dressing is required in the after-treatment of fistula; in fact, it is better to do *too little* than *too much*. If lint, wool, or any other foreign body is

daily thrust into the wound, it is not at all likely to heal kindly; a little cotton wadding or fine oakum laid quite gently in the wound to absorb the discharge and keep the edges from uniting, is all that is wanted. I have constantly seen the healing process delayed by too great interference—probing, and putting lint and ointments or lotions into the sore. I very rarely use anything but the dry wool, and I am no advocate for dressings of any kind. Only when the wound is unhealthy or sluggish do I prescribe lotions: then, according to circumstances, black wash, carbolic acid, nitric acid, the persulphate or tartrate of iron lotions may be advantageous. The compound tincture of benzoin I have found to be an excellent application. When the odor is offensive, as it sometimes is, it may all be removed by a weak solution of carbolic acid and compound tincture of iodine. This is a very useful combination, as the carbolic acid prevents the iodine from staining.

I am firmly convinced that, as a rule, ointments and lotions do harm rather than good: certainly they should never be applied without you have some definite object in view; but I always have the wound well syringed twice in the day with lukewarm water, to which a little Condy's fluid may often be added with much advantage: this can be done with the common india-rubber enema bottle.

Although the surgeon should not interfere with nature's work, he must be always on the watch during the healing process for any burrowing or formation of fresh sinuses; and I wish to state that such development is *generally indicated* by the sudden (and otherwise unaccountable) augmentation of the purulent discharge. Whenever a wound secretes more than its sur-

face seems from your experience to warrant, be sure that burrowing has commenced, and search diligently for the sinus at once, for the longer it is left, the larger and deeper it will get. Sometimes it is under the edges of the wound that it commences; at others at the end of the wound internally or externally; and occasionally it seems to dive down from the base of the main fistula. When the sinus is found, I need scarcely say that it must be laid open at once. One other point: always encourage your patient to tell you directly he has any pain in or near the healing fistula. Never pooh! pooh! his complaints; often he will be the first to discover, by the existence of some unpleasant sensation, the commencement of a small abscess or sinus, and will be able also to indicate its situation.

There can be no fixed rules laid down for the treatment of these wounds: it is in getting them to heal quickly that the skilful surgeon is shown. When to administer stimulants, when tonics, to feed the patient well, yet not to overfeed him, are all points in which common sense, practical knowledge, and the observance of apparently small matters will best guide us. During the healing, do not purge your patient much, but take care that the bowels are fairly relieved; this I generally accomplish by a mild alterative pill.

It is important that the recumbent position should be kept for some time (its duration must depend upon the state of health and the extent and depth of the wounds); too early or too much standing or walking about will not only delay, but sometimes entirely prevent cicatrization. The sooner you can get the wound to heal, the better; for it stands to reason that the longer the wound remains unhealed, the greater is the chance that some fresh abscess or sinus may form.

You never ought to consider your patient quite safe until all sinuses or wounds are healed. I do not keep my patients long *in bed*, but I make them recline upon the sofa: this is especially advisable in delicate constitutions.

Never, if you can avoid it, operate upon a fistula that is from any cause acutely inflamed.

While inflammation is going on, fresh sinuses are sure to form, the areolar tissue breaking down so readily; if you operate under these conditions, failure is almost certain to result. All you ought to do in such a case is to make a free depending opening, and keep the patient at rest until the inflammation subsides, the sac of the abscess contracts, and the formation of sinuses for a time is completed; then, and only then, your operation stands a fair chance of succeeding.

In old-standing cases of ulceration and stricture of the rectum, fistulæ almost invariably form, but the internal opening is very rarely above the stricture, where, from reasoning, one would think it ought to be; sometimes it opens into the stricture itself, but nearly always *nearer the anus than the stricture*. The treatment of these cases will be considered in the chapters on Stricture and Ulceration.

It is a rule with me never to despise a small fistula, more especially if it be directly dorsal or perineal: often, when you divide a seemingly most trivial sinus, you find from the opened track a deeper one passing up the bowel.

Moreover, when this is not the case, slight fistulæ are not rarely difficult to heal. I have been many times much troubled by them, and this is generally the case when they run through the fibres of the external sphincter, and not quite beneath them, so that in oper-

ating only a portion of that muscle is divided. The late Mr. Salmon was in the habit of saying when he had laid open one of these fistulæ, "Now I have made a fissure, and I shall proceed to cure it," and he then drew his knife along the base of the sinus so as to entirely divide the external sphincter. Mr. Salmon was a man of very acute observation, and I am sure in many such instances this practice was the best that could be adopted. I do not say it is always necessary to make a *deep* incision through the sphincter, but I always make one through the muscle in superficial dorsal fistulæ, and I am confident if you neglect this precaution, you will often have difficulty in healing these apparently very trivial sores. If they do not cicatrize quickly, they become very much like fissures in appearance, and the patient will suffer pain more or less severe after, as well as at the time of, defecation. Here is an illustrative case:

A gentleman had been operated upon by one of my colleagues for fistula, and got well; but after some months another abscess formed on the site of the old wound: this burst. When I saw him there was a very small fistula, nearly dorsal, not deep, but tunnelling under the old scar. I opened this. In a fortnight it had not healed: no burrowing had taken place. I touched the sore with nitrate of silver, and ordered him some nitrate of mercury and opium ointment, but still it did not heal; and in another fortnight he began to complain of pain, lasting an hour, more or less, after the bowels acted. I now saw that without a freer use of the knife it would not heal at all, and might, and probably would, get deeper; so I persuaded him to lay up for a few days, and I drew a fissure knife along the

wound, beginning above it and coming below the external end of it, and I took care to go right through the sphincter. This proceeding settled the matter: in about a fortnight he was quite well, and he has remained so. This case made a deep impression upon me, as I saw that the slight incision through the base of a fistula in this class of cases is of no moment when you are operating, and it may save you some anxiety, and perhaps discredit also, afterwards.

Here is another case:

A gentleman went to an eminent surgeon with an apparently very small perineal fistula; it was so slight that the surgeon recommended him to be operated upon at once in his consulting-room; this was done, and the patient went home: after five weeks, the wound not having healed, I was requested to see the patient, and I found from the bottom of the small wound there ran a deep sinus up the bowel, and also forwards nearly to the scrotum. I do not say that these sinuses might not have formed since the first operation; but it clearly shows how careful one ought to be both in diagnosis and prognosis. A certain cure had been promised in this case in a few days.

Some time since, with all the experience I have had, I was thoroughly deceived in this matter of small fistulæ. A man was taken into St. Mark's with a slight perineal complete fistula. I remarked in the operating-room what a trivial thing it seemed; I laid it open, and carefully examined for deeper burrowing, but could not find any; in a few days, the wound looking very well, the patient wished to go out, and with my consent (on his promising that he would not go to

work at once) he did so. Three weeks afterwards he came back, saying that he had some slight pain and discharge of matter from the bowel. On examination I found the wound was quite healed, but on passing my finger into the bowel I detected an opening; from this a sinus ran up an inch and a half, so that I had to take him in again, lay this open, and make a tolerably free incision through the sphincter. I am certain, had I kept this man in the hospital under observation a week longer than I did, he would not have had to be operated upon twice. Such a case in private practice would be pretty sure to get the surgeon into disgrace.

CHAPTER III.

FISTULA IN CONJUNCTION WITH PHTHISIS.

From a surgical point of view I wish to consider phthisis as a complication of fistula. It would doubtless be more correct to regard fistula as one of the complications of phthisis, but I think it better for my purpose to put it in the way I have.

This subject is one of considerable importance, and has scarcely, I think, received from any author the attention it deserves. The majority of writers upon fistula have simply expressed the opinion that in phthisical patients no interference should be attempted with the fistula, generally contenting themselves by stating that if any operation be performed the wounds will not heal, and the patient's life will be shortened. It is the opinion of some eminent men that fistula has really the power of arresting, or at all events retarding the chest affection, and on that ground they would deprecate any operation. This opens up a very important question, which I shall endeavor presently to, in some degree, pursue.

There are other authorities of great experience in consumption, who have expressed the belief that the coexistence of fistula and phthisis is by no means a common one. Andral and Louis both state that they had very rarely observed a conjunction of the diseases. Andral, in fact, says, that out of 800 patients affected

with phthisis he only noticed one case of fistula. According to Louis, tubercular ulceration is very common in the small intestine, and but very rarely found in the colon and rectum. The same doubt as to the prevalence of fistula in phthisis has been expressed to me by eminent physicians, whose opportunities of seeing pulmonary affections have been most extensive. Upon this point I beg to make an observation: I have not the slightest doubt that there are immense numbers of phthisical persons in whom no fistulæ exist; but I have also no doubt that there is a very large number of cases of fistula in which there is tubercular disease of the lungs.

A patient with disease of the lungs going to any of the hospitals for phthisis does not say anything about his fistula to the attending physician—he speaks only of his chest; but the same man comes to me at St. Mark's saying that he has a fistula; I perceive, perhaps at once, that he is consumptive. Of course the physician cannot see that the phthisical patient has a fistula, and the question is very rarely put; of this I am certain, as patients say, "I am attending at such a hospital for my cough." When I ask, did you tell the gentleman you saw that you had fistula? their reply most usually is, "No, sir, I did not."

For my own part, I am quite convinced that a very considerable percentage of fistulous patients have more or less of tubercular lung affection. I have endeavored to find out what the percentage is, and in my own experience I put it down, at the very lowest computation, at not less than 14 per cent.

I will here quote the opinions of those entitled to respect on the question of operation on phthisical patients.

Dr. Bushe, of America, in his really admirable treatise, observes: "It is very apparent that a great many fistulæ depend upon disease of the lungs, therefore we should not operate upon them, else the healing will give rise to an increase of the pulmonary disorder and curtail life."

Mr. Quain says: "When the symptoms of tubercular disease of the lungs are present the operation for fistula is not allowable."

Mr. Curling does not express any opinion upon the question of operation, although he notices the frequent concurrence of the two maladies.

Mr. Erichsen, in his "System of Surgery," objects to the operation save in a few picked cases.

In "Holmes's System of Surgery," the subject is dismissed with this observation: "If a fistula be cut when a patient is suffering from phthisis, the wound, in the majority of cases, will not heal." This I am bound to say is not my experience.

Miller says: "In phthisical cases the wound in all probability would not heal, and supposing that it did heal, the result would probably be most injurious on the system, the pulmonary disease advancing with fresh virulence on the closing up of an outlet whence purulent and other products had been long habitually discharged."

Dr. Theophilus Thomson states that the coexistence of fistula with phthisis appears to retard the progress of the latter disease, acting as a derivative.

In the recent works on phthisis to which I have had access there is no mention made of the subject I am treating.

When we find an opinion so decidedly and generally expressed by men of acknowledged ability and experi-

ence of the subject on which they treat, we very naturally and properly hesitate about calling in question their dicta; but, on the other hand, we should never be prevented from inquiring carefully and diligently as to the grounds upon which that opinion has been based; and should opportunities present themselves we should test whether the opinion is founded on fact. I have always thought that a universally widespread belief, though perhaps exaggerated or distorted, has some considerable element of truth which has served for its origination; but, at the same time, there is nothing more likely to lead to error and stifle the spirit of inquiry than a too easy acquiescence in what may be called "popular creeds."

It must be obvious to everybody that to operate upon a patient with confirmed and advanced tuberculosis would be a positive cruelty, and would undoubtedly hasten his inevitable fate; but there are different forms of phthisis, some evidently not so destructive as was formerly imagined; and we know that many persons whose chests at one period of their lives exhibited undoubted signs of breaking down of pulmonary tissue, the formation of cavities, &c., ultimately recover, and attain a fair old age. Every surgeon who has been much in the post-mortem room must be familiar with the fact that, in old persons who have not died of phthisis, repaired vomicæ and cretification of deposits, probably tubercular, are not uncommonly found. I am quite certain that there are many sufferers from lung affections complicated by fistula, who, because they are said to be phthisical, have nothing done for the cure of their fistulæ, and whose lives in consequence are rendered much more wearisome and wretched than they

might be if an operation had been judiciously undertaken and performed.

For my own part, I do not think we have many, if any, clinical facts tending to show that the operation for fistula in phthisical patients renders the lung affection worse, or makes it more rapidly progressive. In saying this I must not be understood to advocate wholesale indiscriminate operations upon *tuberculous* patients; but I mean that if care be taken in the selection of the proper cases, avoiding interference if possible with *rapidly advancing* phthisis, and the operation be performed discreetly at the right time of the year, and with favorable surroundings, the patients will generally do well, and be benefited and not damaged by the cure of their rectal malady.

I have had several cases, which certainly at first sight appeared to contradict what I have just stated, and I will relate an example:

A man, æt. 35, was admitted into St. Mark's Hospital in the spring of 1867. He was not absolutely an unhealthy-looking man, but he was delicate; he was dark and hirsute, moderately well nourished; the chest was fully developed; there was no dulness on percussion. He had never spat blood, but was very liable to cold, and always had a winter cough. He had a fistula of the blind internal variety, which caused him a good deal of suffering, the aperture in the bowel being large and open.

Now, had this man not been in much pain, in all probability I should not have operated upon him, or at all events I should have postponed doing anything until the summer had more advanced, as I really did not at all like the look of him, but I thought his case

warranted an operation, the more especially as it did not seem that a severe one was necessary. Three days after the operation he was attacked with difficulty of breathing, and on examination it was found that there was pneumonia of the upper part of the right lung; two days later than this he had an acute attack of hæmoptysis; after a time he got better, but there was evidence of breaking down of lung tissue. As soon as possible I sent him out of the hospital to go into the country; he returned much better, with the fistula fairly healed, but I am afraid that as far as his chest was concerned he was in a bad way.

Altogether, I have had six or seven cases in hospital practice almost exactly resembling the one I have related, so much so that it is unnecessary to give them in detail. The general circumstances are these: A fistula, not in a very consumptive-looking patient, suspicious appearance and history being all that could be made out. The patient is operated upon, and in four or five days inflammation of a lung and hæmoptysis sets in, this being in nearly all the cases the first attack. Now, one is not unnaturally led to conclude that the operation is the active cause of the sudden accession of the lung symptoms in these cases; but after all it may not be so; there are other factors to be considered. These may be mentioned: The natural excitement preceding and attending the operation; the different, and probably colder and "drafty" air of the hospital wards; and the *sudden taking to the recumbent position*, by which, in lungs predisposed to disease, statical engorgement may be readily set up, and pneumonia follow. This last I think a very important element in the phenomena; and from this I draw a lesson—never confine your

patients who have a consumptive tendency entirely to bed. I let them recline on the sofa, and sit on air cushions from the day of the operation, and I really think this has a great deal to do with the result. You may accept it as a fact that phthisical hospital patients do not do nearly so well as private patients, and of course nursing and the comforts of a home have much to do with this.

Those gentlemen who object to operating in any case upon a phthisical patient, give different and rather opposite reasons for their objections. Some say, "Do not operate, for the wound will not heal, and the *increased* discharge will be detrimental;" others, "The *healing* of the fistula will be injurious to the patient, as the discharge prevents or retards the progress of the chest affection." I have this remark to make here; that when a fistula has kindly healed I never knew a phthisical patient to be directly the worse for it; *i. e.*, I have never seen the chest affection aggravated or suddenly get worse on the *closing up* of the wound. I think the idea that the discharge retards the progress of the lung disease is rather a remnant of the old doctrine of issues, setons, and derivatives, than a positive fact.

Although I say that hospital patients do not as a rule do well, yet I have had many satisfactory results, even where such could hardly have been anticipated. I will detail some.

A man, æt. 29, was admitted into the hospital a few months ago; he had decided dulness at the apex of the left lung, and had spat blood frequently, and always had winter cough. He had a complete fistula, with a very patulous and large internal orifice, into which fæces were constantly passing, and he consequently

suffered much, and was very anxious to obtain relief. On this ground I determined to operate. I did not confine him to bed more than a few days. I fed him well, and gave him cod-liver oil and tincture of the muriate of iron during the treatment, and I only kept him in the hospital for nine days. He did very well, the wound healed, and as I have seen him since, I know that his chest affection has not progressed.

Here is a very unfavorable case, which, by a little cautious treatment, did well in the end.

A police constable, æt. 29, came to St. Mark's in the summer of 1867; eight weeks previously he had been operated upon for fistula at St. Mary's Hospital. He was undoubtedly consumptive; some time ago had hæmoptysis; he sweated at night, and was very thin and feeble. On examination an unhealthy wound was to be seen involving the bowel; the edges overhung, were livid, and irregularly ulcerated; the mucous membrane of the bowel was undermined to the extent of two inches upwards. A deep incision had been made through the sphincter, and he had no power to retain wind, or his motions if at all relaxed. He coughed a good deal, and expectorated freely; he is very depressed in spirits. It is difficult to conceive of a more lamentable failure of an operation; he was in all respects materially worse for what had been done for him. I scarcely think, had I seen the man at first, I should have interfered with him at all. The question was what could be done with him. Finding that he had friends in the country I advised his going away, and told him to live in the open air all day long, to drink as much milk and cream as his stomach would digest,

and to take a teaspoonful of cod-liver oil, and fifteen drops of the muriated tincture of iron, three times in the day. He had never been able to take the oil, but I managed to overcome his repugnance by giving him one drop of nitro-benzole with every dose, for which hint I am indebted to my friend Dr. Stone, of St. Thomas's Hospital. The patient came back in about six weeks very much improved in general health; he had gained weight and strength. His wound looked healthier, but intrinsically was in much the same condition. I now did not dare to take him into the hospital, fearing the confinement and air; but I thought something might be done to alleviate his condition; so I pared off the overhanging and devitalized edges of the skin, and laid open the sinus under the mucous membrane; I did not confine him to bed at all. A few days after doing this I painted over the sluggish base of the wound with blistering fluid, and thus got the whole wound to granulate. After about five weeks it healed; he recovered very considerable power in the sphincter, and altogether was in a wonderfully more favorable condition than when I took him in hand. To show what an improved state of health he was in I can state that he was able the whole of the following winter to take his turn of night duty without having been once on the sick list.

There is a circumstance which occasions me sometimes to interfere in a case of fistula in phthisical patients, and that is, the mental depression which the rectal affection creates. Frequently the sufferer thinks much more about his fistula than he does about what he calls "his little cough," and is quite dismayed and brought to despair when you tell him that you cannot

do anything to cure him. I am certain that few things conduce more to the rapid progress of phthisis than mental anxiety and loss of hope.

As illustrating this I will relate the case of a young man named Henry, who came to me at St. Mark's in the year 1866. He was in great mental distress because of a fistula, which a well-known surgeon had told him nothing could be done for as he was consumptive. It was true that this patient had suffered from hæmoptysis some time ago, and looked far from being a promising patient; moreover, his family history was unsatisfactory. On examining him I found that his fistula was evidently a phlegmonous one, and not scrofulous; *i. e.*, it began as an abscess, ran an acute course, opened externally, and did not communicate with the bowel, so I thought I could operate upon him with safety. The mere fact of his belief that he would get rid of a most troublesome and annoying disorder rallied him at once. The day following the operation he looked much better than he had done before it, and without any interruption he quickly got well. I watched the man for more than twelve months, and most assuredly his lung symptoms had made no marked advance. I relate cases which occurred some years since, because we have the opportunity of seeing how they terminated.

In the spring of 1866, I operated upon a gentleman, a patient of Mr. Burroughs, of Lee. He was decidedly but not hopelessly phthisical; the undermining of skin in this case was very considerable, and he suffered so much that I had not the least doubt about the propriety of attempting to relieve him. The wound was large, but we had really no difficulty in getting it to heal. I saw a relative of this patient lately who informed me that he continued well and had no return

of fistula. I believe in this case the chest symptoms were absolutely benefited by the operation.

A young man was brought to me by his friends in August, 1864. He was twenty years of age, and had a decidedly phthisical appearance; he had a circumscribed flush on his cheeks; was thin, and had a rapid, feeble pulse; he was a railway clerk, and had been leading a rather irregular life for twelve months previous to his present illness; he had never suffered hæmoptysis to any extent, but had spat mucus streaked with blood not infrequently. There was some dulness over the apex of the left lung, and feeble inspiratory murmur. He took cold on the slightest provocation; he had lost a sister by consumption, and also his maternal aunt; his mother was far from a healthy-looking woman, but his father was strong and had no tendency to pulmonary disease. This was a case I would willingly not have interfered with, but the patient was suffering so much that I determined to try, after improving his health, what I could do for him. The fistula commenced last Christmas as an abscess, which opened spontaneously. When I first saw him he had a sinus on one side of the bowel and an unopened abscess on the other side, and was suffering a good deal of pain. The abscess I opened at once. I put him on cod-liver oil and tinct. ferri muriatis, and soon sent him away into the country. He returned very much better in health, but the sinus had burrowed round behind the anus and joined the abscess I had opened, thus forming the not uncommon horseshoe fistula. He was now importunate for something to be done, and although I was very dubious about the result, I yielded to his wishes. There was one good point in

his case which encouraged me, and that was, the discharge was tolerably healthy. On the 23d of September I operated, not making more incisions than were necessary, but freely removing the overlapping edges of skin. He took full diet—wine, beer, and anything he fancied—from the day of the operation, and (with the exception of a little burrowing under the skin towards the perinæum, which I was obliged to lay open) he made a good recovery. On the 10th of November he was quite well, and was weighed, and showed an increase of *fourteen pounds* since the operation. This lad died of phthisis three years after. The fistula never recurred, and for more than two years he enjoyed fair health.

In the autumn of 1865 an engineer, æt. 43, consulted me at St. Mark's Hospital. He was a pale, feeble-looking man, who had suffered from hæmoptysis a year ago, and again slightly three months since. He had a blind internal fistula, the opening into the bowel being large and ragged. He was quite incapable of following his occupation. When I saw him I declined to operate, and advised his waiting to see if we could get him into better health; however, after a month he became tired of this and went into another hospital where he was operated upon. After being in there about five weeks, his health seeming to give way, he was advised to leave, as the air did not agree with him. He then came to me again. On examining him I found an unhealthy wound leading into the bowel; at the bottom of this a sinus had formed, which ran backwards fully two inches and terminated in a boggy spot beneath the integument. He begged me do something for him; he could not work, and he said he

might as well die as live in his present condition; so with much reluctance, I operated thus: I thrust a bistoury into the boggy part, and from that passed a director along the sinus, which went under the old wound and extended more than an inch towards the perinæum. I laid this all open, the incision being fully four inches in length; from this wound I found another sinus leading up into the bowel, and this also I incised. I removed all the overhanging edges of the skin, and the unhealthy ragged edges of the old wound; altogether it was a pretty extensive operation. I had been compelled to interfere with the sphincter more than I liked, and I had the gravest doubts as to any good resulting from it. These were further increased by his having very smart hemorrhage four hours after the operation, and he lost quite a pint of blood before I got to him. Notwithstanding all this he never had an untoward symptom. He took cod-liver oil and muriated tincture of iron, stout, wine, eggs, and good full diet generally. He did so well that on the 8th of March (he was operated on February 15th) he was able to go out of town, the wound having filled up, and to a great extent skinned over. By the 23d of April the wound was soundly healed, and he was able to return to his business, having got quite stout and feeling strong and well. I saw this patient more than three years after the operation in the enjoyment of good health.*

I will only relate one more case.

In the year 1867 I operated upon a patient of Mr.

* I have seen this patient lately in very good health, and with absolutely no chest symptoms.

Goude's, of Finsbury Square. This gentleman was a very delicate and decidedly consumptive person; he suffered much from winter cough, and had spat blood several times; there was a history of phthisis in his family. His fistula was a complete one and caused him a great deal of pain and inconvenience, interfering most materially with his taking any walking exercise. I operated upon him, and was a few weeks later compelled to lay open another sinus, which had either formed since or been overlooked by me. The wounds were slow in healing, and required a good deal of attention, but finally they cicatrized soundly, and the patient's health was much benefited by his freedom from pain and his capability of walking about. I hear this gentleman is now in much improved health and the fistula remains healed; most assuredly he has not been damaged by what was done for him.

The question of *cough* is a very important one when weighing the probabilities of an operation doing well or ill. I believe severe or frequent cough, no matter from what it arises, most inimical to the well-doing of the patient. There is a man now attending at St. Mark's Hospital upon whom I operated three months ago. He is a stout, healthy-looking man, and has no symptom of phthisis. There was no reason why he should not have recovered quickly, save this one,—he had a bad cough, which we discovered only after the operation. I am sure that the constant succussion from this cough has prevented his wound from healing satisfactorily.

From this arises a maxim I always adhere to: never, if you can possibly help it, operate upon a phthisical patient when the cough is constant; and never operate in unfavorable weather. If your patient is in good cir-

cumstances send him to Brighton or Hastings or some other salubrious, genial place, and perform the operation there. You will find he will get well in less time, and perhaps save you anxiety.

Assuming, as I think we safely may, that many patients, the subjects of fistula, have also a tendency or predisposition to phthisis, it will not be unprofitable to consider for a moment why this should be the case. The conjunction has been ascribed to tuberculous ulceration of the bowel, but my experience does not lead me to the same conclusion. Certainly, fistula in consumptive patients often commences by ulceration in the rectum. I am sure of this, as I have on several occasions traced the incipient ulcer to the fully developed internal fistula. But tuberculous ulceration though common in the small intestine in young subjects, is rare in the adult, and *undoubtedly rare* in the rectum.

Ulceration of the rectum is not infrequently found in persons who give evidence of struma in the form of enlarged glands, old abscesses in the neck, &c., but I have not seen *rectal ulceration* and *tubercular* disease of the lungs coexistent in any number of cases.

The rule in my opinion is, that fistula in patients who have a predisposition to pulmonary consumption commences by a breaking down of the connective tissue beneath the mucous membrane of the rectum; thus a small abscess is formed, and this makes its way into the bowel very rapidly, leaving a large patulous aperture. Therefore, I think we may safely say that the same condition of health or constitution which renders a patient vulnerable to pulmonary affections generally, renders him also prone to fistula. These people are usually thin and ill-nourished, and have very little powers of resistance against injurious influences; in-

flammation, which in robust individuals would only end in the effusion of plastic material, in them terminates in the production of numerous and very perishable cells, which readily form themselves into purulent collections, especially in lax tissues. Probably I should say, the want of fat in the ischio-rectal fossa and its neighborhood disposes to the formation of an abscess there. The veins have to sustain a considerable column of blood, and they are, moreover, exceedingly ill-supported, so that local congestions and feebleness of circulation must be a common condition. I am inclined to think that these general causes are sufficient to explain the phenomena without any reference to supposititious tuberculous depositions.

Fistulæ in persons of a phthisical tendency are marked by certain peculiarities which I think important to notice. Some I have already casually mentioned, but I will here state them clearly.

They have a disposition to undermine the skin and mucous membrane with remarkable rapidity, but not to burrow deeply.

The internal aperture is almost always large and open; on passing your finger into the bowel you can feel it most distinctly, often as large as a threepenny piece.

The external opening is also frequently large and ragged, not round; it is irregular in form; the skin surrounding it is livid and flapping; when you pass your probe into this aperture you can sweep it round over an area of more than an inch, and not infrequently the skin is so thin that you can see the probe beneath.

This is a very different condition from the external orifice of a fistula in a healthy person which is usually

small and *pouting*, and the skin is not detached to any extent from the underlying structures.

The discharge is thin, watery, and curdy, very rarely really purulent.

The *sphincter muscles* are almost invariably *very weak*. When you introduce the finger into the bowel you are hardly sensible of any resistance being offered. I think this a most important indication of constitutional weakness, and from it I derive this practical lesson: *When operating upon a patient with phthisical proclivity interfere as little as possible with the sphincter muscles, especially the internal.* If you divide the sphincter much there will be great danger of incontinence of fæces.

It is common to observe in these patients much longish, soft, silky-looking hair around the anus.

With any of these peculiarities strongly marked I am always suspicious of my patient's strength: with all of them or several of them present, I feel certain of his condition and act accordingly.

I should say from my experience, if you have a phthisical patient suffering from a fistula which gives him much pain or inconvenience, by taking certain precautions you may relieve him of it without running any risk of damaging him. When a case of this kind comes to me I am never in a hurry to operate. I like to watch the patient for a little while and observe whether the lung disease is advancing; find out if the cough is constant; often these patients will tell you that they cough very little, when their friends notice that they do so almost perpetually. Wait, if you can, for genial weather, when your patient need not be confined to a close room. As to the operation, I have already said that although it must be *thorough*, you

should interfere with the sphincter as little as you can, and fortunately it is not usually necessary, as the sinuses are mostly superficial. After the operation let the patient have good diet; by all means, plenty of milk; if he can take it he may have a little cod-liver oil and steel and quinine, separate or combined; do not confine him to bed; let him lie on a mattress; if you can manage it let the bed-room face south or west, and get plenty of fresh air into the room, the patient lying well covered up on a couch by the open window for hours, in fact, nearly all day. Do all you can to keep him amused and cheerful; avoid poulticing the wound; disturb it as little as possible, keep it clean by well syringing night and morning, and use a little astringent lotion, if necessary, but no ointments; the compound tincture of benzoin agrees very well with these wounds. Do not be in a hurry to get the bowels open, and manage this rather by diet and laxatives than a purge; if you set up a diarrhœa in these patients it will give you trouble and delay the healing of the wound. Unless there is furring of the tongue, headache, or loss of appetite, I do not think the bowels need be relieved more than once in three or four days; all these matters may appear so trivial that there is but little occasion to mention them, but I am sure that attention to apparent trifles will make just the difference between success and failure with the patients about whom I have been writing. With an extended experience in these cases, since writing this chapter for my first edition, I can find nothing important to add, nor any statement to modify.

CHAPTER IV.

HÆMORRHOIDS.

Almost from time immemorial hæmorrhoids have been divided into two varieties, viz., the external and the internal, often also popularly called blind piles and bleeding piles, and this classification is founded upon a true pathological distinction; for, although it may be correctly said that external piles may and do encroach upon the mucous membrane, and so are partially internal; and further, that internal piles, by reason of frequent prolapse, become more or less external; yet, in the majority of cases, the difference is well marked, and admits of not the slightest doubt as to the diagnosis.

In the *external* form the observer will perceive that they are either the true hypertrophies of skin, exaggerations of the natural rugose state of the anus, or rounded and elongated venous-looking tumors which pass up into the bowel.

In the *internal* kind he will observe that they are tumors originating within the anus, but which have been forced down outside, and even may have put on a pseudo-cutaneous appearance from exposure; having been, for more or less time, subjected to the same conditions the skin is. In addition to this he will notice there are also, in very many cases, cutaneous excrescences which are plus the internal piles. Should the

surgeon still have any doubt as to the kind of hemorrhoid he has to deal with, let him return all the protruded part that he can within the sphincter ani by gentle pressure—at the same time directing the patient to retract or draw up the lower part of the gut, and he will then find out what is redundant skin and what is internal hæmorrhoid and prolapsed mucous membrane of the anus. I have been rather particular in these introductory observations, because I have so often seen considerable doubt in the minds of practitioners as to the character of the affection they had to deal with; and a correct conclusion is all-important, especially if any operative procedure be meditated.

External Hæmorrhoids.

This affection is so prevalent that very few persons, either male or female, arrive at middle age without having in some degree suffered from it. They occur almost equally in the robust and the weakly, in the rich and the poor, in the active and sedentary. No doubt some occupations and modes of life conduce to the production of external hæmorrhoids more than others; still, I repeat, there is no class of society or state of constitution which can be said to be entirely exempt. The skin around the anus, and the mucous membrane, at the verge of that aperture, are remarkably delicate in structure, they are also profusely supplied with nerves and small vessels; from these facts it arises that anything tending to irritate that region may cause congestion and inflammation of the part, and result in an attack of piles, as perhaps the simplest expression of such irritation. Again, obstructions of the liver or portal system, fecal accumulations, or any-

thing rendering the return of blood from the rectum difficult, is likely to conduce to the same end. From this we can readily imagine that a great variety of causes may bring on an attack of piles; the following may be mentioned: Constipation, diarrhœa, too good living—especially the consumption of large quantities of meat—very coarse fare, indulgence in alcoholic drinks, excessive smoking, violent and prolonged exertion, sedentary occupation, exposure to wet or cold, discharges from the bowel resulting from internal diseases, pregnancy, uterine diseases, friction from clothing, and the use of printed paper as a detergent—especially the cheap papers from which the ink comes off on the slightest friction—the neglect of proper ablutions (this is very important; many persons seem to forget that the anus requires quite as much washing as any other part of the body), straining, however induced; all these are among the common causes of external hæmorrhoids.

I have already said that two varieties of external piles may be recognized; the first ought to be called hypertrophies or excrescences of the skin; the second, sanguineous venous tumors. When you look at either of these in an uninflamed state, you would think them harmless enough; in the one case you would only observe around the anal orifice a certain redundancy of skin, forming little flaps or tabs more or less pendulous, in addition to the small radiating corrugations seen in the normal state; in the other case you perceive veins, blue, rather raised above the surface, and running up into the bowel, resembling, indeed, varicose veins. Now these conditions, so innocent in their appearance, are prone, at a very trifling provocation, to take on active inflammation, and to cause the patient an amount

of suffering quite disproportionate to the pathological appearances.

Let us look at them when inflammation has set in. These small tabs of skin are much increased in size; they may be very swollen, œdematous, and shiny; they are exceedingly painful to touch; sometimes they ulcerate, or suppuration may take place if the inflammation runs very high, and hence small but painful little fistulæ arise. At times the œdema is so considerable as to extend into the bowel and form a large swollen ring of skin and everted mucous membrane all round the anus.

So with regard to the sanguineous venous hæmorrhoids, they are swollen into ovoid or globular bluish tumors, very hard, and exquisitely painful; they can be pinched up between the finger and thumb from the tissues beneath, and they feel as if a foreign body were present there. Sometimes, but rarely, they can by gentle pressure be emptied of their contents; but this proceeding is not followed by any benefit to the patient, as in a few hours they become more painful and larger than before. These tumors may be single, or two or three may be present at the same time; by irritation they set up spasm of the sphincter and levator ani muscles, so that they are drawn up and pinched, thus adding much to the patient's suffering. Just as he is falling to sleep, a spasm takes place, and wakes him again; in addition, there is a constant throbbing, and the sensation as if a foreign body were thrust into the anus; this excites the desire every now and again to attempt to expel it by straining, which, if indulged in, of course aggravates the pain. Often the patient cannot sit down, save in a constrained attitude; nor can he walk; and when he coughs, the succussion

causes acute suffering. When the bowels act, and for some hours afterwards, the distress is greatly increased, and the patient, if not absolutely confined to bed, is quite incapable of attending to his business. Accompanying all this, there is general feverishness, furred tongue, and usually constipation. Such, then, are the symptoms of an acute attack of external piles, and if not a serious matter, it is one causing great worry and loss of time,—an important point in these hard-working days. Moreover, one invasion predisposes to another. I have known many patients who periodically suffer what I have described.

There is a difference of opinion as to the mode of formation of these venous tumors. Some consider them to be coagulations of blood in varicose veins; others as extravasations into the connective tissue. I believe that both these views are correct. I am certain that I have often found clots contained in a distinct sac, formed of inflamed and condensed areolar tissue, without any communication with a vein, and on the other hand I have in some cases been able to squeeze the blood out of the tumors into the vein of which they seemed to be a terminal enlargement; but the question to my mind does not seem an important one, as it in no way influences the treatment to be adopted.

It is very desirable to notice the earliest, or rather the premonitory, symptoms of one of these attacks, as by this knowledge it may possibly be warded off, or at all events much mitigated. Not unfrequently a little extra eating and drinking, without any absolute excess, is the exciting cause; an indulgence in effervescing wines—full-bodied ports or new spirits—being especially dangerous. The earliest symptom is a sensation of fulness or plugging up, and slight pulsation in the

anus; there is also a tendeney to eonstipation, indueing a little straining; this is frequently followed by itching of a very annoying character, coming on when the patient gets warm in bed, keeping him awake for some time, and indueing him to seratch the part. In the morning he finds the anus a little swollen and tender, and if he be an observant person with regard to himself, he will notice after a motion a slight stain of blood. Now, all this may pass off with the simplest care and the slightest medication; but if the patient neglects himself, it will surely be the precursor of a more or less severe attack.

The treatment in sueh a ease should be abstinence from aetive exercise, rather spare diet, well-cooked vegetables, and not much meat, no beer or spirits, and no wine, if possible; if the patient must take some stimulant, a glass of light sherry, with Seltzer or Vichy water, will be the best beverage. If he is a smoker, he must cut down his usual allowance; smoking often causes a sympathetic irritation of the throat and reetum. He may take a warm bath or a Turkish bath, and should wash the anus night and morning with warm water and Castile soap; after this, apply some glycerin and tannic acid, or some calomel ointment. As to medicines, he may take a Plummer's pill, with a little taraxaeum and belladonna, for two or three nights at bedtime; and in the morning, fasting, some effervescing citrate of magnesia, or this draught, which I find very useful on many oecasions: ℞. Liq. Magnes. Carb., ʒss.; Potassæ bicarb., ʒj; Syrup or Tinct. Sennæ, ʒij; Spt. Æther. nit., ʒss.; Aquæ puræ ad ʒij. Half a tumbler of Pullna water, if preferred, will answer the same purpose.

If the ease be neglected, and adviee is not sought

until active inflammation has set in, and the symptoms I have described are in full force, you will save your patient much time, pain, and after-trouble by snipping off the inflamed cutaneous excrescences, or in the case of the sanguineous tumors laying them freely open. The tabs of skin may be frozen by the etherizer, seized with a pair of toothed forceps, and quickly snipped off with a pair of strong scissors. The pain soon ceases and the wounds heal readily under any simple dressing. Care must be taken not to recklessly cut away too much skin, or contraction will follow; so you must not make quite a clean sweep of it, but take off a portion only; that which is left will contract in the process of healing. The best method of opening the venous swellings is as follows: pinch up the tumor gently between the finger and thumb of the left hand, transfix its base with a curved bistoury, and cut out; at the same moment by pressure with the finger and thumb the clot may be extruded; place a piece of fine cotton-wool at the bottom of the sac, and the operation is completed; the pain soon subsides, and the patient makes a speedy convalescence. The incision should be made in the direction of the radiating folds of the anus, as this allows more completely of the contraction of the skin. If these sanguineous tumors are not interfered with, the blood in them will in time become absorbed, and they ultimately form the cutaneous flaps already described. It is always well in these cases to ascertain, by means of an injection, whether there be any internal piles associated with the external; if so, they must be attended to, or the patient will be only made worse by any operation on the external hæmorrhoids.

If the patient will not submit to the treatment I have

recommended, the swollen parts should be well smeared with extract of belladonna and extract of opium, equal parts, and a warm poultice applied. This in many cases gives very speedy relief, and, as a rule, is much more efficacious than cold applications. But sometimes it happens that cold is found by the patient to be more soothing; in that case a lotion of Goulard water, with extract of opium and belladonna, is useful, or ice may be pretty constantly applied. It does not do to freeze the piles with the ether spray as I have seen recommended, for as soon as the cold goes off the pain is worse than ever. I have never seen much benefit derived from leeching. Some surgeons have insisted that the inflammation should be reduced before removing the piles by excision. I do not think there is any need for this; certainly the parts are very tender and sensitive, but this can be overcome by thorough freezing, and I am convinced that convalescence is much hastened by the removal of the inflamed and œdematous tissues, and as far as my experience goes, no danger in any way need be apprehended from the operation if it be properly performed. I much too often see these cases treated by drastic purges and gall ointment; this, I am bound to say, is not good practice; it is harmful to the patient and damaging to the reputation of the surgeon.

I have said that one attack of external hæmorrhoids predisposes to another; it is, therefore, very advisable for the patient so to live as, if possible, to ward off this repetition. Generally he should eat sparingly; and fish, fresh, well-cooked vegetables, and ripe fruits, should form a considerable part of his diet; he should avoid spirits and beer, and take as little stimulant of any kind as possible; strong coffee and highly seasoned

dishes must not be taken; he should not smoke, or only very moderately indeed; he should take plenty of walking exercise, but it should not be violent nor continued to overfatigue; he should sleep on a mattress, and never omit to wash the affected part night and morning with cold water; lastly, he should keep his bowels acting daily. If this cannot be accomplished without some medicinal aid, he will find equal parts of the confections of black pepper, sulphur, and senna, a capital remedy; of this one or two teaspoonfuls may be taken every morning; or night and morning if required. I have had some experience in the use of the waters of Friedrichshall and Carlsbad in these cases, and I think them very beneficial, particularly in persons who are prone to congestion of the liver. A steady perseverance in the line of treatment I have suggested will, in all probability, eradicate the hæmorrhoidal tendency.

Internal Hæmorrhoids.

All those causes I have mentioned as bringing on external hæmorrhoids tend also to produce internal piles, but in addition we may name hereditary influence and the recovery from childbirth.

During pregnancy external venous hæmorrhoids are frequent, and these may, and do, often pass away after labor in common with varicosities of the legs and labia vaginæ; but the reverse is the case with regard to internal hæmorrhoids; these most frequently make their appearance after parturition, when all the parts are relaxed and uterine involution is going on. I will not attempt to give any reason for this; I only state a fact I have over and again observed.

Internal piles present several varieties in appearance, structure, size, position, and other characteristics.

They may be so small as to exhibit little more than an increased number and size of capillary vessels, with thickening of the submucous tissue, or they may be large solid tumors the size of an ordinary hen's egg. Some hæmorrhoids are attended with bleeding of an arterial character, others with venous hemorrhage, while some, particularly in their latter stages, do not bleed at all. Some lie quietly high up within the internal sphincter, and are only to be protruded by straining after the administration of an enema; others come down always at stool, and whenever the patient makes any exertion, or stoops, walks, or stands about much; again, some are always down. This last only obtains in old-standing cases. These various conditions depend in great measure upon the duration of the disease, and the condition of the sphincter muscle as to strength or weakness; a relaxed condition, such as frequently exists in women and in men of lax fibre, allowing the protrusion of even small hæmorrhoids on the slightest exertion. This may be specially noticed in the common case of a perineal hæmorrhoid in females who have borne children.

As a rule patients do not suffer much from internal hæmorrhoids, unless they become inflamed or are constantly coming down and getting compressed by the sphincter; hence the amount of suffering also depends in a measure upon the state of this muscle, as also does the amount of congestion of the piles themselves. Inflammation is very soon lighted up in these cases; unusual straining with a costive motion, a drastic purge, sitting on a damp seat, oversexual indulgence, or a little excess in alcohol or in eating, may be sufficient to start

it. When the part is extruded and gets nipped by the sphincter partial strangulation takes place, and in some cases you see large, inflamed bluish hæmorrhoids constricted by a broad band of everted sphincter muscle and mucous membrane, and this may take place to such an extent as to occasion more or less sphacelus. I have very rarely seen this occur to a degree sufficient to effect a cure of the malady, although it may afford temporarily great relief.

In the earlier stages of the complaint, when the piles come down at stool, they return within the sphincter spontaneously after the bowel is emptied, or upon the patient resuming the erect posture, or, at all events, upon lying down and voluntarily retracting them. Later in the progress of the disease the patient is compelled to return them by pressure, and then they keep up; but in still further advanced cases, although returned, they will not remain when the least exertion is made.

As regards the structure and appearance of internal hæmorrhoids, three broadly-marked kinds may be observed, viz., the capillary hæmorrhoid, the arterial hæmorrhoid, and the venous hæmorrhoid; at times all perfectly distinct, at others united in the same patient.

The first variety I should describe as small, florid, raspberry-looking tumors, having a granular, spongy surface, and bleeding on the slightest touch; these piles are often situated rather high up in the bowel. Although they are so insignificant in size, the quantity of blood lost from them may be very considerable, and occasion a serious drain upon the patient's constitution; I have seen many persons quite blanched by the losses they sustained.

In structure they consist almost entirely of hyper-

trophic capillary vessels and spongy connective tissue, and therefore I think a good name for them is the "capillary hæmorrhoid." They resemble arterial nævi very closely indeed in their microscopic structure, except that they are covered externally by a very much thinner membrane, and consequently are readily made to bleed. If these hæmorrhoids exist for a considerable time uninterfered with, or if powerful astringents are applied to them, they lose their velvety granular appearance. The bleeding ceases, or diminishes greatly, and they remain dormant for a longer or shorter period; but, in most cases, they eventually recommence growing, and assume a smooth shining surface, resembling ordinary mucous membrane; at the same time, the main vessels feeding the growth increase in diameter, and the areolar tissue becomes thickened and more abundant; an exudation of lymph and fibrinous matter takes place beneath the mucous membrane, obliterating the capillaries and arresting the bleeding from the surface. These changes I believe to be the result of slow processes of inflammation. I am here only describing what I have repeatedly seen, and I think in this way most commonly the second variety, or *arterial internal hæmorrhoid* is formed.

They may be thus described: Tumors varying in size, attaining sometimes very considerable dimensions, glistening on their surface, slippery to the touch, hard and vascular, if scratched they bleed freely, the blood is bright red, and issues *per saltem*. If you pass your finger into the bowel, you will feel entering into the upper part of each hæmorrhoid an artery, pulsating with as much force as the radial, and, in many cases, of a calibre but little less than it. On dissecting one of these tumors you will find it to consist of a number

of arteries and veins freely anatomosing, tortuous, and sometimes dilated into pouches, and a stroma of cell growth and connective tissue, the latter most abounding. These advanced hæmorrhoids are certainly not as some have described them, merely dilated vessels with a little cellular tissue, or sacs, or cells with fluid contents which can be emptied by squeezing.

The third variety is the *venous internal hæmorrhoid*, and in this the venous system predominates. The tumors are often very large. I have seen them quite the size of a hen's egg. They are bluish or livid in color, and they are hardish; the surface may be smooth and shiny, or pseudo-cutaneous; they prolapse very readily, and are often constantly down; they do not usually bleed much, but if pricked the blood may be either venous or arterial. This form is commonly found in women who have borne many children, and who have an enlarged or retroverted uterus; they often occur about the change of life. They are also seen in men with enlarged or indurated livers, in whom the portal system is constantly engorged, and the circulation through the abdominal viscera is obstructed. This is the form of hæmorrhoid spirit-drinkers get.*

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* Although venous hæmorrhoids usually are found in adults, I have seen them in children. Here is a case. Henry S—, æt. 3, was brought to St Mark's Hospital, October, 1865. He never was a robust child, and looks delicate now. For eighteen months his mother has noticed something come down when he went to stool; latterly he complained of pain, and there had been slight bleeding. On examination nothing abnormal could be seen. Of course I suspected polypus, and ordered an injection to be given; after the bowels had acted I found three well-marked venous hæmorrhoids had come down outside. There was slight ulceration of the mucous membranes between them. Laxatives, cod-liver oil and steel wine, together with the use of astringent ointments, effected a cure.

I never hesitate about operating on these cases, but I observe certain precautions; in women the uterine complication should be attended to, and in men it will not do to allow them to live too freely after the operation; for some little time the bowels should be kept well acting, and stimulants should be interdicted; if this is not done you may get symptoms of congestion of the head, shown by flushed face and tensive throbbing headache, or an attack of gout may supervene, as I have seen on several occasions. Sometimes hemorrhage of venous character will take place a week or ten days after the operation from the surface of the unhealed wounds; if this is not excessive it should not be interfered with. No doubt these are the cases that the older writers advised should not be operated upon for fear of apoplexy or other internal disease. My experience is that there is no danger, if ordinary common-sense precautions are adopted.

I have frequently been consulted as to the propriety of operating upon hæmorrhoids in pregnant women. I think the operation quite admissible, if the patient is losing much blood, or is suffering greatly. I recently had a case at St. Mark's, in a woman, five months pregnant, who was voiding such quantities of blood that she was quite blanched, and it was absolutely necessary to interfere; she had no untoward symptoms after the ligature of five piles, nor was her recovery much retarded. I have operated many times, always in urgent cases, but only once has a miscarriage resulted. I always keep these patients recumbent longer than ordinary cases, as if they get about too soon the wounds do not heal well.

It has often occurred to me to point out the three varieties of hæmorrhoids I have described, as existing

at the same time in the same patient, which, I think, tends to confirm the opinion I entertain, that they are only modifications of one initial disorder. I would by no means dogmatically affirm that what I have called the "arterial hæmorrhoid" always follows, or is preceded by, the capillary form of hæmorrhoid, but I am sure it is frequently so; it has happened to me several times to see cases where nitric acid has been applied to capillary piles with the result of arresting the bleeding, and for months or longer relieving the patient, but the second variety of hæmorrhoid has been gradually growing, and eventually you find fully formed tumors.

Here is an illustration.

A gentleman came under my care in the year 1862. He had two very characteristic capillary hæmorrhoids, and lost almost daily a quantity of blood. The case was one peculiarly well suited for the nitric acid treatment which at that time was all the fashion. I applied the acid thoroughly without causing any severe pain. The result was highly satisfactory; the bleeding was at once stopped, and the patient left my care quite happy.

In the year 1864, about eighteen months after I had first seen him, he again consulted me, complaining of discomfort in the rectum and of a protrusion on going to stool. He only very occasionally lost blood; on examination after an injection I found three hæmorrhoids fully formed, and I advised an operation by ligature. He, however, objected to that, and wished me to reapply the acid; this I declined to do, knowing that it would not in any degree benefit him. He went away to consider whether he would have the operation done, but he did not return again for nine or ten months; he

hen told me that after seeing me he consulted another surgeon, who applied nitric acid four times for him, but that he had gained only very temporary benefit, and that he was now worse than ever, and wished for a radical cure. On examining him I found five hæmorrhoids, three large and of the venous character, and two small of the capillary kind, which had formed since I saw him.

Some years ago it was a common thing for patients to come to St. Mark's Hospital with advanced hæmorrhoids, relating this history: "Their piles had been (as they called it) operated upon a year or so before with acid, and for some time they were better, but that latterly they had become worse than ever, but they rarely bled now, although before the acid was applied they lost a good deal."

Although the three broad divisions I have described are most usually seen, sometimes it occurs to one to find a large hæmorrhoidal tumor with a granular capillary surface which bleeds very freely. These are piles that for some reason or other have formed and grown very rapidly; they are usually situated high up the bowel, and have not come down outside, and have not therefore been at all inflamed.

In the capillary hæmorrhoid the patient's symptoms are principally such as arise from repeated small losses of arterial blood, which I have noticed are much more exhausting than venous hemorrhages; the latter often relieve, the former always in time depress. These piles are so small that they give no trouble by their size, and they only protrude slightly, if at all, on going to the closet. Moreover, there is no pain unless there be the complication of ulceration. These patients complain of frequent pains in the back and loins; also in the

male, in the spermatic cord and testicles. They have great lassitude, and not infrequently the sexual powers are interfered with. I have seen many cases in which this was the symptom that induced the person to seek advice. One case particularly is recalled to my mind from the fact that the gentleman had paid a large sum of money to a charlatan who had been treating him for impotence, the result of spermatorrhœa. In women menstruation may gradually cease, and a condition of profound anæmia result. This is well illustrated by a case that was sent me by my friend the late Dr. Chapman, of Biarritz.

A young lady, æt. 20, formerly robust and healthy, gradually fell ill; she became languid, fretful, fanciful, and very anæmic. Menstruation ceased almost entirely; only once in three or four months had she a scanty pale discharge. She did not complain of any pain except in the back and legs on attempting to walk. She had taken any quantity of ferruginous medicines, and had been recommended by various medical men to try the baths at Schwalbach and other German watering-places, the disorder being supposed to be uterine. Through delicacy, she never mentioned that she had lost blood per anum, and she had never been directly asked the question. Fortunately for her, Dr. Chapman, under whose care she came, put it to her point-blank, when she admitted that she bled almost daily when the bowels acted. The mystery was now solved. By the advice of Dr. Chapman she came to me, and I found that she had three very vascular capillary hæmorrhoids. I removed them. Recovery ensued without a bad symptom, and she soon regained her former health.

It is these daily small losses which are apt to be

overlooked, and which female patients accustomed to their monthly flux scarcely think worthy of mention, but which, when added to menstruation, become a serious matter, and speedily induce chlorosis, and an amount of debility which can only be combated by removing the primary cause of the malady. Very tiresome constipation is usually found attendant upon this condition, and this often continues after the patient has recovered her general health. It is only to be overcome by patient attention to diet, exercise, and the administration of such medicines as give tone and gently stimulate the colon, without irritating or purging. I have found galvanism a valuable adjunct to other treatment. You do not generally find more than two or three capillary hæmorrhoids in the same patient—very often only one; and in women this is almost always *perineal*, and then it is very easily prolapsed. It is this variety of the disease which is benefited by the application of fuming nitric acid. I say benefited, not absolutely cured; for, in my experience, you cannot by any means be certain of effecting the latter. Had the use of the acid been restricted to this form of pile, it would not have fallen into such utter disuse as it has; it was the unsurgical attempt to cure large, hard hæmorrhoids with it that brought it into discredit. In these small vascular, granular piles, strong carbolic acid is a very good application; but, short of an operation, I have most faith in the curative powers of the persulphate of iron. This may be applied fluid (℥j being soluble in ℥ss. of glycerin and ℥ss. of water) or in the form of an ointment (℥ss. to ℥j of unguentum cetacei is the strength I employ). It acts as a most powerful astringent; it is not a cauterant; if carefully applied, it causes no pain,—in fact, in inflamed hæmorrhoids it

seems to act as a sedative; it arrests hemorrhage with absolute certainty; it is very manageable, so that you may use it in your consulting-room, and the patient can go away afterwards without suffering; and a mild form of the ointment, say two grains to a drachm, may be prescribed for the patient to apply at home after action of the bowels. I have with this remedy effected many cures, and materially relieved numbers of cases, when an operation has not been desirable or when the patient was too nervous to submit to one. I am confident now, from a large experience, that it is a most valuable agent in the treatment of many rectal affections.

If you intend to apply strong nitric acid you must first get the piles well protruded, then dry them thoroughly, and touch the vascular parts *only* with a small glass brush, taking the utmost care not to let the acid come in contact with any healthy tissue; if you manage to avoid this, very little pain will be experienced. After applying the acid, well oil the part and return it within the sphincter.

I may as well remark here that the capillary hæmorrhoid, or the pile with a capillary surface, is the only form likely to be much benefited by the application of nitric acid or acid nitrate of mercury. Ten years ago, when this treatment was much in vogue, it was frequently used in the most reckless and unscientific manner, quite regardless of how much it really could do. I used to see at the hospital, patients with large, fully developed rectal tumors, to which acid had been applied half a dozen or more times, causing great pain, and with the result of no real curative impression being made upon the disease.

In the second variety, or arterial internal hæmor-

rhoid, the suffering occasioned is more directly associated with the condition of the hæmorrhoid itself as to inflammation or ulceration, and with the state of the sphincter ani muscle. These piles protrude at stool, or on making some particular movements, as stooping, &c., and in that way alone they cause much discomfort; they also discharge a gummy acrid mucus, which keeps the part constantly damp, leads to excoriations around the anus, and favors the growth of cutaneous excrescences; moreover, it stains the linen, and this to sensitive, delicate-minded persons, is a source of great annoyance. Generally, after visiting the water-closet, the patient is some time before he can get at all comfortable, often having to lie down for a time, and when he walks about he is almost always aware of the fact that he has a rectum. In health no person feels that he possesses one organ more than another, unless he has to use that organ; often the first intimation of impairment of health is the recognition of the fact that there is a preponderance of sensitiveness or some abnormal sensation in one member of the body. So in rectal diseases the fact is always present to the mind of the sufferer that he has an anus. He scarcely ever feels that his bowel has been properly relieved, and this often leads to frequent visits to the closet, and attempts to procure satisfaction by straining, which ultimately aggravates the malady. The condition of the sphincter ani plays an important part in causing distress; if it be strong and tight, when the piles come down, they get nipped and their return is rendered difficult and painful; on the other hand, if the sphincter be lax the bowel is constantly coming outside on the slightest exertion, as in coughing, stooping, or even walking; and in these cases when the bowel is

down, the patient can rarely hold liquid motions. I frequently meet with patients who say they have to retire to a urinal and push up the protrusion when it descends, or they cannot walk at all. The employment, of course, has much to do with the discomfort of the patient; again, constipation adds greatly to the severity of the symptoms, and so also does habitual relaxation, which, by causing frequent protrusion, induces inflammation and ulceration of the part. These advanced hæmorrhoids are almost always attended with cutaneous hypertrophies around the anus, and these, being irritated by the discharges, become inflamed and very tender. Sometimes I have seen a number of polypoid growths studded over the mucous membrane at the entrance to the anus; in a patient of mine recently at St. Mark's Hospital I counted twelve of these.

When called to a patient who has got his piles down and cannot return them, proceed in this way: Place him flat on his face, with three or four pillows under his pelvis, to raise the hips well up, and allow the intestines to gravitate towards the chest; then smear the piles over with some ointment, pass one finger into the bowel, and with the other hand gently apply pressure, trying to empty the piles of their superfluous quantity of blood; this should be done very gently, as you would apply taxis to a hernia. Should this not succeed, place a bladder of ice over the part, and leave the patient in the position I have recommended for an hour; then try taxis again, and you will in all probability return them. I have found on several occasions that freezing with the ether spray has been an effective and more rapid method of inducing contraction temporarily, and removing the sensitiveness so that you can apply more

direct pressure If you have not been able to succeed in getting up the piles, try and persuade the patient to have them operated upon without delay; if he will not accede to this, you may order some leeches or apply moderate cold. If there be much strangulation ice should not be kept on very long, or you may produce more sphacelus than you desire. In some instances warm applications with sedatives are more comforting, and relieve pain sooner than cold.

For my own part I never hesitate to operate at once if I can get my patient's consent, as you thus obtain a speedy and radical cure of the disease. I never saw a case of this kind do worse than any other, although some surgeons had said that inflamed hæmorrhoids should not be operated upon. I will make an exception in cases of protruded piles where mortification has set in to any extent; here, although it may be necessary to operate, care must be taken, as the tissues are so broken down that the ligatures will not hold and hemorrhage may result. In a case I had in the practice of Dr. Tanner, of Newington, the parts were so friable that the ligatures cut through the piles, and there was considerable difficulty in arresting the bleeding; I accomplished it by passing a tenaculum deeply below the vessels and applying a ligature around it. I then cut the tenaculum away from the handle, and left it in for three days. This patient did exceedingly well, and was about in less than a fortnight.

In old-standing prolapsed hæmorrhoids there is frequently a difficulty in retaining wind or loose motion; this is partly caused by the relaxed weak state of the sphincter, but more particularly, I believe, by the loss of the acute sensitiveness of the mucous membrane at the lower part of the rectum. This sensibility in the

healthy subjeet gives timely warning to the sphineter ani to eontract when necessary.

Very rarely in advanced states of hæmorrhoidal disease is a eure effected without having reeourse to an operation, but I have seen sueh cases; one particularly reeurs to my mind, from the faet that I had given a most positive opinion that no permanent benefit could be obtained without operating. This was a gentleman, past middle age, who had suffered for years; his piles were full sized, they used to bleed mueh, and always protruded more or less at stool; they were of the venous eharaeter. In this ease great attention to the state of the bowels, always lying down to have an action, and remaining reeumbent for an hour or two afterwards; eare as to diet, which was of the most unstimulating eharacter and almost devoid of alcohol; smearing the piles over with the persulphate of iron and other astringent ointments; the oeeasional use of a full-sized bougie; injection of a quarter of a pint of eold water daily, and the internal administration of Ward's paste, tincture of the muriate of iron, and other remedies, in about four years effeeted a eure. At least this patient told me lately that he had no trouble now with his piles; nothing came down at stool, he had no bleeding, and suffered no other inconvenienee. This gentleman was, I must say, able to eommand every comfort, and was never in any way eompelled to exert himself; he had an insuperable objeetion to anything like an operation, but was most determined, persevering, painstaking, and intelligent in carrying out all the devices I have mentioned. Sueh eonditions are rarely met with in ordinary life; so for all praetical purposes it may be said that an operation is absolutely indispensable.

It is in the third or venous kind of piles that I think constitutional treatment most likely to be successful, not, perhaps, in curing the disease, but in materially alleviating it, as they often depend upon uterine maladies, upon liver affections, and a generally overloaded congested condition of the system found in those who habitually eat and drink too much, and who take but little exercise; these causes may, to a great extent, if not altogether, be removed, and if they are so, the hæmorrhoidal disorder will be found to be benefited to an equal degree. It is in these cases that a prolonged course of the Friedrichshall and Carlsbad waters will be found useful. I have also seen benefit derived from the oil of sandal-wood taken in conjunction with such remedies as relieve congestion of the portal system, and depurate the blood generally.

In women suffering from a retroverted or anteverted uterus an operation upon piles is very undesirable, and will most certainly end in disappointment unless the uterine complication be attended to at the same time, or, what is better, prior to the operation. My experience warrants me in saying that if you can restore the uterus to its normal position and size, you will find that the rectal affection will soon become a comparatively small matter. In my earlier operations upon women I did not take into sufficient consideration the condition of the uterus, and I could relate many cases in which I was most grievously annoyed to find that the patient did not recover, as I anticipated she would have done. I have found that if the wounds heal there is but little relief afforded, the same bearing down and distressing sensation exists in the bowel as it did before the removal of the piles. More commonly the wounds do not heal, and very painful unhealthy ulceration follows; this will

never get well as long as the abnormal condition of the uterus remains. I will briefly relate a case or two bearing upon this point.

Mary C—, æt. 34, came under my care, in the early part of the year 1862, at the Farringdon Dispensary. She was a single woman, and had suffered for years from hæmorrhoids; they came down at stool; she lost blood, and had much bearing down; she was likewise troubled with her water, passed it very frequently and with difficulty, never feeling that she had quite emptied her bladder. The urine was not turbid, and she did not have actual pain—only discomfort. On examination four full-sized hæmorrhoids were found (their character is not stated in my notebook). Aided by my friends Dr. Frodsham and Mr. Charles Smith, I applied ligatures to them. The operation was followed by retention of urine, and a catheter had to be passed for the first few days; while she was in bed she seemed better, but after a fortnight, when she began to get about, she complained of bearing down in the "back passage," and much pain in defecation. The bowels were very difficult to get to act. These symptoms I expected would pass away when the wounds were quite healed; but, to my dismay, they did not, and two months after the operation I found there was ulceration of the bowel, and she suffered a great deal. I had for some time suspected that the uterus was not right, so I obtained the opinion of Dr. Edward Cock, who was at that time the obstetric physician to the dispensary, and that gentleman pronounced that she had a fibroid tumor of the uterus (this diagnosis was afterwards confirmed by many other authorities). I need not prolong this history—suffice it to say that she never got well. For

years I saw her occasionally; she always had rectal symptoms, and underwent a great deal of pain. I do not think the ulceration of the bowel ever entirely healed. I took her into St. Mark's Hospital in the year 1867, and by rest and treatment she got better, but not well; for the last three years I have lost sight of her. I believe she gained admittance into one of the hospitals for incurables. I am quite certain of one thing, *i. e.*, she was not benefited, and I am strongly of opinion that she was damaged by the operation I performed upon her.

Emma N— was admitted into the Great Northern Hospital under my care in February of 1864; she was a single woman, æt. 24. She complained of great pain in passing her motions; the pain lasted for hours, and then gradually subsided, and she was easy until she had again to go to stool. Of course my diagnosis was fissure, and I was correct, but in addition I found three large internal arterial hæmorrhoids. I incised the fissure and tied the piles. She went on very well and left the hospital, feeling quite comfortable, and being free from pain on the bowels acting. In about a month she came again to me, saying that her old symptoms had returned, but, on examination, I could find no fissure, or ulceration, or anything the matter with the rectum; she complained of pain and straining when the bowels acted, and a sensation of not being relieved afterwards. The only thing I could find to account for this was a tendency to intussusception of the upper part of the rectum on her bearing down. I treated her with laxatives, sedative injections, suppositories, and other remedies, but with very little benefit; what seemed to do her most good was rest in bed. Suspecting uterine

disease, I recommended her to see an obstetric physician, and she came under the care of my friend Dr. Palfrey, and that gentleman found that she had retroflexion of the uterus. She was under his charge for a very long period, and underwent some operative treatment at the London Hospital. After this I took her into St. Mark's Hospital, but could never find any organic mischief in the rectum, although she still suffered pain and much discomfort in connection with defecation. I have recently heard that this patient is now better, but for years she was incapable of doing any work. It was said that masturbation was the primary cause of this woman's suffering; it might be so, but I cannot say that I am prepared to indorse that opinion.

Mrs. R—, a patient of my friend, Mr. Charles Waller, of Sydenham, was operated upon by me for severe hæmorrhoids, Mr. Waller assisting me. I knew this lady was suffering at the same time from vaginismus, but I thought that the removal of the rectal disease might be generally beneficial to her health, which was very much deteriorated by the losses of blood she sustained. After the operation she was much better for a few weeks, but the wounds in the bowel healed with great difficulty, and after some time she had a good deal of pain on defecation, and the bowels were very confined; I could not discover any disease of the rectum, although her symptoms were directly referable to that organ. A year or so later she was operated upon by Dr. Barnes for the cure of the vaginismus; but I know that she has never recovered good health, and is an invalid to this day, her sufferings being most prominently rectal.

I could relate many more cases illustrative of this fact, that operations upon rectal diseases, associated with uterine affections, do not as a rule end satisfactorily.

In cases of hæmorrhoids in persons with congested livers, or who habitually eat and drink too much, I always precede the operation by administering every night (for three or four nights) a five-grain blue pill, and in the morning a modification of the old-fashioned black draught. This may seem to be rather rough treatment, but I see the most beneficial results accrue from it; and I am confident that patients thus served do better than many others; again and again I have been perfectly astonished at the rapidity with which they recover.

CHAPTER V.

OPERATIONS UPON HÆMORRHOIDS.

Having made up your mind to operate upon a case of internal hæmorrhoids, the important question arises as to which method of operating should be preferred. In days gone by, excision was performed by Dupuytren and others, but as they all acknowledged the danger of that procedure, and doubtless many fatal cases occurred, we should not be justified in running such a risk; putting aside excision, there remains for us to choose from (for I do not consider the application of nitric acid or any caustic an operation) the operation by ligature, with the clamp and cautery, by the écraseur, the galvano-cautery, and clamp and torsion.

That the galvanic cautery may be safely used for the removal of piles I have personally proved, but I cannot recommend it. Very great improvement is needed in the apparatus before it can be at all generally applicable.

The écraseur I think I am justified in considering as a barbarous and unsurgical performance when applied to piles, and it is very often unsuccessful. Lately I have seen a gentleman who was operated upon with the écraseur in Paris by an eminent French surgeon, but the operation was not thoroughly performed; for three months after it he still had large protrusion, and I removed for him by ligature four full-sized hæmor-

rhoids. I do not know one good reason for adopting it, and I do know that painful and permanent contraction of the anal orifice has followed its use.

That the clamp and actual cautery operation possesses intrinsic merits is, I think, sufficiently proved by its having survived the somewhat indiscriminate laudation of its friends.

That I am no opponent to the operation may be inferred from the fact that I have employed it in more than ninety very varied cases of prolapsus and internal hæmorrhoids, at the same time I cannot indorse the statements that have been made respecting it by its ardent admirer and advocate, Mr. Henry Smith.

The operation was originally devised by Mr. Cusack, of Dublin, but it met with very slight patronage; it was reintroduced by Mr. Lee, of St. George's Hospital, and its claims have more recently been brought before the profession by Mr. Henry Smith in connection with his "improved clamp."

This is the way in which the operation should be performed. I will premise that in all operations about the rectum, but more particularly in cases of piles, it is essential that the alimentary canal should be thoroughly cleared before operating. The patient being thus prepared, administer an enema of warm water, and direct him to strain the piles well down while evacuating the injection; this being accomplished, place the patient upon a hard couch or mattress in a good light; the position should be on the right side, with a little tendency to roll over on to the stomach, the knees are to be drawn up to the abdomen, and if the patient has the courage to strain down during the operation, he will very much facilitate the manipulations. The assistant should stand with his back towards the patient's head,

and raise the upper buttock with his right hand; at the same time, by hooking his elbow over the pelvis, he can keep the patient in position. The surgeon then with a vulsellum or pronged hook seizes one of the piles on the lower tier, draws it down, and applies the clamp; he then cuts off the pile with a pair of scissors, curved on the flat (care should be taken not to cut too close to the clamp, so as to leave a good stump for cauterization); this done, he uses the actual cautery iron at a dull red heat, being especially careful to thoroughly seal the vessels at the upper or most internal part of the hæmorrhoid, as it is there they are largest, and the danger of bleeding greatest. The clamp should then be slowly opened; if any bleeding point is seen, the cautery must be reapplied; if there should be no sign of bleeding the clamp may be removed. This proceeding must be repeated on every hæmorrhoid *separately*, until all are excised. The taking *two* piles into the clamp at once is sure almost to result in hemorrhage.

If the cautery iron be made to touch the stump of the pile *only*, and is never brought into contact with the metal of the clamp, the patient will not experience any pain from the burning, but if it be done in a bungling manner, and the hot iron is placed on the surface of the clamp, the heat is felt directly. If you are neat in your operating there is no occasion for ivory plates upon the clamp, and it is much better to dispense with them, as the thickness of the clamp is materially increased by them. After all the hæmorrhoids are removed, return the parts well within the sphincter, any superabundant skin may then be cut off with the scissors; it is advisable to administer an injection of half a drachm of Liq. Opii sedativus, with an ounce of cold starch to allay the pain.

I shall now describe the mode of treating hæmorrhoids and prolapsus by the ligature, as applied at St. Mark's Hospital, after the manner devised by the late Mr. Salmon, and practiced at that institution for more than thirty-five years. In expressing, as I do most unreservedly, the opinion that ligature is by far the best and most generally applicable method of operating, I must be understood to refer to the operation I am about to describe, and not to the usual method of applying the ligature by transfixion of the base of the pile, and tying it in halves. The preparation and position of the patient and assistant should be the same as I have said to be desirable in the clamp operation.

The hæmorrhoids are to be seized by the operator one after another with a vulsellum or pronged hook-fork, and drawn down; he then with a pair of sharp strong spring scissors separates the pile from its connection with the muscular and submucous tissues upon which it rests; the cut is to be made in the sulcus or white mark which is seen where the skin meets the mucous membrane, and this incision is to be carried up the bowel, and parallel to it, to such a distance that the pile is left, connected by an isthmus of vessels and mucous membrane only.

There is no danger in making this incision, because all the larger vessels come from above, running parallel with the bowel, *just beneath* the *mucous membrane*, and thus enter the *upper part* of the pile. A well-waxed strong silk ligature is now to be placed at the bottom of the deep groove you have made, and the assistant then drawing out the pile with some decision, the ligature is tied high up at the neck of the tumor as tightly as possible. If this be done, *all the vessels must* be included. The silk should be so strong that you

cannot break it by fair pulling. If the pile be very large, a small portion may now be cut off, taking care to leave sufficient stump beyond the ligature to guard against its slipping. When all the hæmorrhoids are thus tied, they should be *returned thoroughly* within the sphincter; after this is done, any superabundant skin which remains apparent may be cut off; but this should not be too freely excised for fear of contraction on the healing. An injection of Liq. Opii sedativus may be administered. I always place a pad of wool over the anus, and a tight T-bandage, as it relieves pain most materially; this was remarkably apparent in a case I recently operated upon in the practice of Mr. Sutton Sams, of Lee; the patient after the operation more than once tightened the bandage himself with the result of removing all the pain, and arresting the spasmodic contraction of the sphincter muscles.

It is advisable to commence operating upon those piles that are situated inferiorly, as the patient lies, in order that the others may not be obscured by blood; but when the hæmorrhoids are numerous, and there is a small perineal or dorsal pile, as there frequently is, it is better to tie the small ones first, as there is danger of their being overlooked or becoming retracted, and thus rendered very difficult to find when the larger hæmorrhoids have been ligatured.

When the patient has chloroform it sometimes happens that the protruded piles slip up into the bowel again. I have seen inexperienced operators much worried and flustered by this, but you need give yourself no anxiety about it; when the patient is fully under the influence of the anæsthetic, you can, by opening the anus with your fingers, easily coax the piles down again, and if you take hold of one with the

vulsellum, the rest will speedily follow; but should there be difficulty arising out of *spasm* of the sphincter (as sometimes occurs in cases where the chloroform is not well borne), you can at once overcome that by forcibly but slowly dilating the sphincter, by introducing two fingers into the bowel, and separating them towards the tuberosities of the ischia. In women the object can be readily obtained by inserting a finger into the vagina, and pushing the rectum down.

After the operation, the bowels should be confined at least for three or four days by an astringent draught; the formula I use is the following: Pulvis Cretæ Aromat. ℥j; Tinct. Opii, or Liq. Opii sedativus ♏xv; Spt. Æther. nit. ℥j; Mist. Camphoræ, ad ℥iss. To be taken night and morning, or three times in the day for two days. This will very much assuage pain, prevent the tendency to strain, and keep the bowels confined. In very bad cases and in delicate persons I frequently keep the bowels quiet for a much longer period than four days. I have done so for a week or ten days, and I think, in some instances, with very manifest advantage. The diet at first should be light: soup, beef tea, a little boiled fish, milk gruel, tea and toast will be quite sufficient; no alcohol at all should be taken; perfect rest in the recumbent position should be enjoined. On the third or fourth night, according to the state of the patient, a mild aperient may be administered, and after it has acted, a more liberal diet may be allowed, but I always advise abstinence from wine, beer, or spirits, unless there be some special condition indicating the necessity for their use.

It is well to tell your patient that some temporary, but possibly rather acute, pain may be experienced on the first action of the bowels, and also that a slight

discharge of blood *may* take place (it is by no means always so); if you neglect this, needless alarm is often created, the patient imagining, if he sees any blood or has much pain, that all his old trouble has returned.

I think it advisable, though not absolutely necessary, that the patient should keep lying down until the ligatures separate, which almost invariably takes place about the sixth or seventh day, ocasionally a day sooner, very rarely a day later. If the ligatures are tied tightly and the incision has been free, this course of events is but very seldom departed from. *Active exertion*, even after the separation of the ligatures, is to be deprecated until the sores left in the rectum are healed; a fortnight, or a little longer, is generally about the time required to accomplish this. It is quite unnecessary that the patient should be kept in bed all this time, or even to his chamber—he may move about in moderation; but I am certain that a too speedy resumption of the erect position is likely to retard the cicatrization of the wounds.

I have had patients who have gone about their business with ligatures on their hemorrhoids, and have sustained no injury. Here is a case of that kind. A gentleman on the Stock Exchange was operated on by me some years ago; it was rather more than an average case, five ligatures were applied. On the day following the operation some sudden turn of the markets rendered it absolutely necessary for him to go to town. When I called upon him, to my surprise, I found that he had left home; and for three days consecutively he went to his office, and remained there for five hours transacting his business, as he afterwards assured me, with very much less inconvenience than he had frequently experienced before the operation, when the

piles came down. He was, in the end, none the worse for his temerity, but it is an example by no means to be commended or followed. Mr. Quain in his work relates a parallel case. It is no uncommon thing for me to have patients who are able to resume their ordinary occupation on the eighth or ninth day. Recently I had a case sent me by my friend Mr. Williams, of Brentford, who also assisted me at the operation. The hæmorrhoids were very large, and four ligatures were applied, but there was *no superabundant skin* requiring removal. This gentleman was really *quite capable*, on the eighth day, of walking a distance, and was rather surprised that I requested him to abstain from much exercise; he had no pain, or any symptom to indicate that he had not perfectly recovered, but I am sure it would have been very unwise of me to have allowed him to do as he wished. The wounds inside the rectum, I knew, could not be soundly healed, and the delay likely to be occasioned by too much exertion or standing about might be serious. Under these circumstances the sores possibly would not heal, and painful and troublesome ulceration, very difficult of cure, be the result. The veins of the rectum are destitute of valves, and only badly supported by areolar tissue; these sores, therefore, much resemble in their conditions varicose ulcers of the legs; and we well know in such cases rest in the horizontal position is absolutely necessary to insure a speedy and certain cicatrization.

Pain after the operation varies according to the constitution and nervous sensitiveness of the patient, and also as to the condition of the parts *before* the operation. In very severe hæmorrhoids that have been much down and outside the anus the pain is usually slight, as the sphincter and also the levator ani muscles are relaxed.

In comparatively slight cases, when the sphincter and levator ani are strong, the irritation causes spasm of the latter muscle, and occasions a sensation of drawing up, which is very painful. This generally occurs as the patient is falling off to sleep, and it awakes him with a start. The injection into the rectum of some Liq. Opii and starch lulls the pain, but only for a short time; I much prefer a hypodermic injection of morphia, beginning with not more than one-eighth of a grain, and if that be well borne, increasing it to one-sixth, or even a quarter of a grain; this used night and morning will keep the patient quite comfortable. The only objection to this plan of treatment is the danger of its causing vomiting, which every now and then it does, and, of course, this act would add considerably to the suffering of the patient. Some time ago I operated upon a medical man from the country, in whom hypodermic injection acted so well that, after his recovery, he told me that he had not suffered anything worthy of the name of pain since the operation. I have not found the hydrate of chloral so beneficial as I had anticipated I should do, and I have tried it in a good many cases. In very nervous sensitive patients the constant application of ice to the anus allays pain in a most marked degree. Sometimes the following lotion is at once successful in relieving spasm: Extracti Belladonnæ, gr. iv; Extracti Opii, gr. vi; Liq. Plumbi subacetatis dilut. ad ℥j; wool soaked in this to be kept constantly applied to the part.

However acute the pain may be at first, in about six hours after the operation it subsides, and comparative ease follows You may always comfort your patient by the assurance that he knows the worst of it, and that the pain will surely, if gradually, become less.

I am quite convinced that the higher you carry your incision up the bowel the less does the patient suffer, because the ligatures are removed from the most sensitive part of the rectum, and lie quietly above the sphincters; in favorable cases the pain is by no means very severe. After the ligatures come away I always direct my patients to douche the anus well night and morning with cold water; this is very comforting, and materially hastens the convalescence.

Every now and then you may have retention of urine follow the operation; in most cases a warm hip-bath will enable the patient to pass water in the morning; if not, of course, a catheter must be introduced. Straining to micturate should be avoided under any circumstances. This retention is by no means very uncommon in women, but I have found it occur much oftener in men. This may be accounted for by the fact that so many males have more or less of stricture of the urethra, so that a slight irritation is sufficient to set up spasm. After a day or two the power of emptying the bladder returns.

Sometimes after a severe operation upon internal hæmorrhoids, contraction may take place in the bowel on the healing of the wounds. This contraction is not at the anus, nor is it skin, but mucous membrane only; time alone will generally remove it; but as it may occasion straining and distress to the patient, I advise the passing of a bougie for a few nights, or, what answers as well, and is less alarming, I direct the introduction of the forefinger, well anointed, into the bowel night and morning. Occasionally I have seen, under similar circumstances, a spasmodic contraction of the internal sphincter, so that when the finger was introduced into the bowel, you felt it grasped tightly by the

musele; this condition may for a time eause constipation whieh will require attention; but eventually the spasm subsides and the bowels become regular in their action.

Now, shortly, the advantages I claim for the operation I have described, as performed at St. Mark's Hospital, are these:

1st. The rapidity with which it may be executed. I have often operated upon four or five hæmoïrhoids, returned them, and removed redundant skin in one minute and a half or two minutes.

2d. There is only a very small amount of tissue ineluded in the ligature; in fact, little more than the vessels supplying the tumor.

3d. At least three-quarters of the wound is a simple ineised wound whieh heals rapidly, only the small portion ineluded in the ligature having to slough away.

4th. The ligatures are tied a eonsiderable distanee from the anus, so that, when returned into the bowel, they lie above the internal sphineter, where the sensibility of the mucous membrane is not aeute, and eonsequently the pain and irritation after the operation are redueed to a minimum.

5th. The operation is wonderfully free from danger to life, and its results generally are almost always satisfaetory.

I do not think in the whole range of surgery there is any proeedure worthy of the name operation whieh ean show a greater amount of sueeess.

In the year 1865 I published in the "Medical Times and Gazette" some statisties of the praetiee at St. Mark's Hospital, which showed that, in 1763 operations upon hæmorrhoids, there had been five eases of tetanus, four oeeurring in the spring of the year 1858.

two in March, and two in April. Since the year 1858, upwards of 1450 operations have been performed, and there has not been any case of tetanus; and in these 3210 cases there has not been one single case of *pyæmia*. I have often wondered at this, and I do not attempt to explain it. I simply state the fact. I have now myself operated with the ligature upon rather more than 500 cases, and I have never had a *death* from any cause.*

I have said that I must demur to some of the statements made by Mr. Henry Smith in his "Lettsomian Lectures" in praise of the clamp and cautery operation. For example, he writes: "In this operation there is absolute freedom from danger."

I scarcely think this can be said of any operation, however trivial. Death has resulted from the extraction of a tooth. Tetanus has more than once followed the simple matter of tapping a hydrocele. I should be inclined to argue that the danger in operative surgery does not reside so much in the operation itself as in the condition of the patient at the time of the operation and in his surroundings after it.

And again: "It is not possible† that either tetanus or pyæmia, the two most formidable results of the ligature, can occur after this operation."

I will not attempt to oppose arguments to such an assertion as this. Here are facts to answer it.

My colleague, Mr. Gowlland, had in his private practice a death occur from undoubted pyæmia after the operation with the clamp and cautery. The patient was an elderly man of broken-down constitution. I

* There has been no case of tetanus or pyæmia at St. Mark's since the first edition of this work was written.

† In the last edition of Mr. Smith's work I see that he has substituted the word "*probable*" for "*possible*."

leave the details for Mr. Gowlland himself to publish if he should think proper to do so.

Mr. Timothy Holmes has kindly informed me of a case under his care at St. George's Hospital.

A man, æt. 27, who had been a soldier in India, and whose constitution was much broken, was operated upon for piles by the clamp and cautery; pyæmia set in, and he died twelve days after the operation.

I assisted in making the post mortem in the following case:

A man, æt. 56, of rather drinking propensities, was a dispensary patient of a friend of mine. He had two large internal hæmorrhoids; my friend was desirous of removing them by the clamp and cautery, and he requested me to assist him. Being busy at the time, I was obliged to decline, but I lent my instrument for the performance of the operation. Five days afterwards I was requested to see the patient, and I found him in the following condition: he had suffered since the day before my visit a repetition of rigors, not severe but fairly marked; he sweated after the shivering had passed off. He was rather jaundiced and inclined to be lethargic, and he would not take his food. His breathing was rapid, and large crepitating sounds could be heard all over the chest, but more particularly over the posterior portions of the lungs. He had a furred but not dry tongue; his pulse was 120 and feeble. He sank gradually, and died on the thirteenth day after the operation.

Post-mortem examination twenty-four hours after death. The body was thin and the skin yellowish in tint. Rigor mortis but little marked. The lowest

lobe of the right lung contained several circumscribed suppurating masses. In the pleural cavity was quite a pint of purulent-looking fluid. The left lung was congested, and recent lymph was seen on the pleura. The bronchi of both lungs contained thick, tenacious, frothy mucus. In the upper part of the right lobe of the liver was a pyæmic deposit as large as an orange. The peritoneum in its neighborhood was coated with recent lymph. There was a small abscess in the left kidney, and about two drachms of pus were found in the cellular space between the bladder and the rectum. The rectum itself was carefully removed with the anus. Two sloughy sores existed where the piles had been excised: one was an inch in length by three-quarters of an inch in breadth; the other was a little smaller. There was an abscess higher up the rectum, situate posteriorly; this was inadvertently opened in getting the bowel out of the pelvis; there was no communication from it into the rectum. No pus was discovered in the hæmorrhoidal veins, nor did they appear to be inflamed. The bladder was healthy.

Dr. Dundas, of Brussels, recently related to me a very similar case, upon which he had made the post mortem, very acute pyæmia having set in a few days after the clamp and cautery operation.

Comment upon these facts I think quite unnecessary.

I do not know of any case of tetanus resulting from the clamp and cautery operation upon *hæmorrhoids*, but it certainly has occurred to me to hear of that malady following a burn. One case was published by me in the year 1857. I removed a very vascular growth from the entrance to the vagina of a young woman; the hemorrhage was arrested by the actual cautery, no

ligature was used. Tetanus supervened in five days and she died. If tetanus can follow a burn in one case why not in another? It is quite evident that there is no operation however simple which can be said to be exempt from the danger of tetanus in certain climates or states of the atmosphere.

Very rapid recovery is one of the advantages claimed by Mr. Smith for the clamp and cautery operation. The majority of his patients, he states, get about in from four to seven days.

I have said that I have performed more than ninety operations with the clamp, but most assuredly my patients have not made such wonderful recoveries, nor have the cases I have seen in the practice of my colleagues or other surgeons. I do not deny that patients may be able to get about as early as Mr. Smith says, but I say it would not be safe for them to do so, nor judicious of the surgeon to allow it. I have examined these patients over and over again, and have always found, even *ten days* after the operation, that the sores in the bowel had not cicatrized. And I assert most confidently that much exercise is likely to be very damaging as long as the wounds in the rectum remain unhealed. When patients get about too soon after operations upon hæmorrhoids, no matter how performed, they often have intractable ulceration follow. I could relate many cases in support of this statement; a few, however, will suffice.

A gentleman from the country, recommended by an old patient, came under my care; he had heard much of the clamp and cautery, and wished me to apply that mode of treatment to him. Finding that his case was very well adapted for it, there being only three piles

and no external flaps of skin, I assented. He did exceedingly well, had but little pain, and was very much pleased. On the eighth day after the operation, feeling quite comfortable, he left London. I did not dare to ask him to stay longer, for I feared he might think that pecuniary gain was my object; but I warned him against taking active exercise for at least a fortnight. It happened to be the shooting season, and he was an ardent sportsman; so when he got home he did not follow my advice and lie on the sofa, but began to pursue his favorite pastime. The day following his first day's shooting he had rather severe pain in the rectum, so he rested for twenty-four hours and then walked again; this day he was compelled to return home early, feeling quite knocked up. Continued throbbing in the anus caused him to have an unquiet night: in the morning he felt incapable of exertion, and on his bowels being relieved he suffered acute pain. After this he rested, but finding after three weeks that he was not really any better he returned to town to see me. I found that an unhealed rectal sore had burrowed outwards some distance under the skin towards the perinæum; this I was, of course, obliged to lay open; there was also another sore situated dorsally. I was very sorry and annoyed at this untoward result, but the patient had the good sense to acknowledge that I had given him fair warning, that he had ignored my advice, and, therefore, had only himself to blame. He was more than a month under my care before he was well enough to go home again—certainly a poorer if a wiser man.

A girl was operated upon by me at St. Mark's Hospital. Three hæmorrhoids were removed with the

clamp and cautery; she left the hospital in sixteen days. She had suffered a rather unusual amount of pain, but I thought she might safely leave. After being away three weeks working at a sewing machine, she returned complaining of throbbing and bearing-down pain, and agony on defecation. On examination I found that ulceration had resulted, spreading nearly all round the circumference of the bowel. She was two months in the hospital before she got well.

Mr. A—, æt. about 50, came to me with this history. Fifteen months ago he had been operated upon by a most able man—a surgeon in one of our metropolitan hospitals—with Mr. Smith's clamp, one large perineal hæmorrhoid having been removed. On the sixth day he was told that he was quite well enough to go home, a distance into the North, and accordingly the next day he went; however, the journey so upset him, that he was for weeks confined to his sofa, suffering great pain, and having hemorrhage every time his bowels acted.

He wrote to the gentleman who had operated upon him, explaining his state; in reply, he was told that there could not possibly be much the matter, and that he would soon be well with a little rest. This prognosis was not verified, for as the patient emphatically said to me, "from the day I got home, to the present time, I have never had twenty-four hours of comfort."

The symptoms he suffered from were pain in the perinæum and end of the penis, worse after passing water, but very constant at other times. When he walks or sits long there is pain down the thighs and under the buttocks, also a good deal of lumbar weakness; he is kept awake all night by throbbing in the perinæum and anus; defecation, if the motions are at

all hard, is followed by pain; he has frequent attacks of diarrhœa, lasting a few days, and occasionally he has bleeding from the bowel. He has consulted several eminent medical men in the Northern Provinces, and has been sounded more than once for stone without any being detected. He is not very thin, but looks worn and feeble—he was formerly very robust; sexual intercourse is attended with great pain in the perinæum, which lasts for hours afterwards. I had no hesitation in saying that he had ulceration with probably some slight stricture of the bowel. On examination I found no stricture, but a deepish ulcer existed on the prostate gland. This case resisted all treatment for a very lengthened period, and I much doubt whether this gentleman is well now.

The next is a case where no overexertion was made, and yet the convalescence has been very protracted.

I saw, through the introduction of my friend, Mr. Buxton Shillitoe, a medical man who had been operated upon by a most eminent hospital surgeon for prolapsus. The clamp and galvanic cautery were employed. He kept his bed-chamber for a month, and had considerable pain and swelling in the bowel. When I examined him it was more than three months after the operation, and I found ulceration in the rectum, and still some tendency to prolapse of the mucous membrane. He then complained of constipation, having great difficulty in getting the bowels to act; following each motion there was more or less swelling, which subsided after an hour or two of rest. There was also a sero-sanguineous discharge on going to stool. I do not think this could be published as a satisfactory case.

Emily L— was admitted into St. Mark's Hospital in April of 1871. She is married, thirty-four years of age, and has had six children. Her illness had existed for five years; she has lost blood frequently, and has a prolapsus when she goes to stool, also when walking or standing about. Two vascular hæmorrhoids were found on the left side of the bowel; they bled freely on being touched. On the 24th I operated upon her with the clamp and cautery; a little redundant skin was also removed. She was desirous of going out, and left the hospital on the 8th of May, not quite well, but suffering no pain on defecation. At the end of the month she returned, complaining of great pain and throbbing in the anus; she acknowledged that she had been exerting herself a great deal. On examination I found that an abscess had formed on the left side of the bowel, and had burrowed considerably.

I have, I think, related sufficient cases to show the necessity of patients being careful, and not overexerting themselves after the clamp and cautery operation; I do not say that it is not equally necessary when the ligature is used, but I can affirm that I have seen a much greater proportion of untoward results from the clamp than from the ligature, not only in my own practice, but in that of other surgeons also; and I attribute this in a great measure to the too early getting about.

Mr. Smith says there is but little pain attending or following the operation with the clamp and cautery.

My experience is quite opposed to this observation. It is very difficult to gauge the amount of suffering in different individuals; one is very sensitive, and feels acutely; another seems scarcely to feel, or at all events makes no sign of being in pain. I am bound to say

that my colleague's patients, as well as mine, often complain bitterly of the operation. There is one important element to be considered when chloroform is not given, and that is time. The operation with the clamp, when carefully and thoroughly performed, cannot be done quickly. A person may endure acute suffering for one or two minutes, but if it be continued longer, even a much less severe pain becomes unbearable. As to the suffering after the operation, the general statement of my patients has been, that the pain following the use of the clamp is very considerable, and that all the first night there is spasm of the sphincter, and retraction of the levator ani, which is exactly what occurs after the ligature. Our hospital nurses say, as a rule, the patients suffer more after the cautery operation than after ligature.

I have a good many times been annoyed after the clamp operation to find my patient has had slight but recurring arterial hemorrhage; this has always come on when the bowels acted, and continued even for two or three weeks. This is by no means dangerous, but it is annoying alike to the patient and the surgeon. Here is a case which troubled me much.

An American gentleman, æt. 41, was sent to me by my friend Dr. Clapton, of St. Thomas's. He had suffered from piles seven years or more; they came down and bled furiously at times; he had four very vascular arterial hæmorrhoids. On the 20th of July he was operated upon with the clamp and cautery. No external skin required removal; all night he suffered an unusual amount of pain. On the 23d the bowels acted; the pain was very acute, and he lost quite a teacupful of arterial blood. From this date the bowels acted

naturally every day, but he had considerable pain, and always lost blood; this pain and bleeding continued, despite the use of many remedies, until the 28th of August, more than a month from the day of operation, when it gradually began to diminish, and soon ceased altogether. I examined this patient carefully several times with a speculum, but I could not find the place whence the hemorrhage arose. This gentleman, without being plethoric, was very robust, and could afford to lose blood, but had the same amount of daily hemorrhage occurred in a delicate person, I should have felt bound to interfere more actively than I did.

As I continue to employ the clamp and cautery in my practice, it may be asked in what cases I think it desirable to use it. I wish it to be understood that I consider the operation a good one in selected cases, but I do not for a moment admit that it has any superiority over the ligature when properly applied. I think the clamp may be satisfactorily used in slight cases of internal hæmorrhoids when there are not more than three or four tumors, and especially when there are no external piles, or hypertrophic skin requiring removal. If there be much superabundant skin there is no possibility of the clamp being any advantage; for the external sores will not allow of the patient recovering under a certain time, however the operation may be performed. In cases of prolapsus of the lower part of the rectum, or one side of it, as is most frequently the case, I use the clamp, and also when there is only one largish perineal or dorsal pile. I never employ it *now* in bad cases when the hæmorrhoids are numerous, and really large vessels enter into their composition; I have operated in many such, but I found so much difficulty in arresting hemorrhage with the cautery, it had to be ap-

plied many times, and after all I felt that I really lacked that *absolute* security which one always gets with a well-applied ligature. In some of these cases I followed, and, I am sure, with much advantage, the practice adopted by some gelders of horses in the North. I sprinkled a little powdered resin over the stump of the pile before applying the cautery. I am certain that this adds materially to the safe sealing up of the vessels, but after all, as I have said, I always had a feeling of insecurity, and I knew well that, if arterial hemorrhage did commence after the piles were retracted into the bowel, it would be very difficult to find the bleeding vessel and apply a ligature to it.

During the past year I have several times removed small hæmorrhoids by means of torsion after they had been seized by a clamp. The clamp I employ is one designed by me; it acts in such a manner as to grasp the pile vertically, and not laterally; after the clamp is applied I take hold of the hæmorrhoidal tumor with a pair of broad torsion forceps and slowly twist it off. I have only as yet tried this mode of operating in single perineal or dorsal hæmorrhoids, or where two small ones have existed, so I do not advocate its use in very pronounced cases when the tumors are large and numerous, but in some instances I think it will prove better than the clamp and cautery. There is very little pain inflicted, provided you do not clamp skin; little or no danger of hemorrhage, and an unusually speedy recovery has resulted in the cases I have operated upon; a further experience, I trust, may enable me to say something more positive about this mode of treatment. My instruments, I now see, are capable of much improvement, but still they answer the purpose fairly well; they were made by Mr. Ferguson, of Giltspur Street.

CHAPTER VI.

COMPLICATIONS OF HÆMORRHOIDS.

Hæmorrhoids are not infrequently complicated by the coexistence of other affections of the rectum. I have many times seen piles, polypus, and fissure in the same patient. I will mention the more frequent complications, so that the reader may be warned against the error of being satisfied with merely finding his patient has piles without searching to see if any other malady be present.

Fissure, or small painful ulcer, is very often associated with hæmorrhoids, and a careful examination is needed to detect it, as one of the tumors may overlap the fissure so as entirely to conceal it. Always suspect fissure or ulceration when your patient tells you he suffers pain on defecation, or pain continuing long after the bowel is relieved.

When a fissure or ulcer exists it is necessary to make an incision through it (so as to set the sphincter at rest) at the same time that you operate upon the piles, then both maladies will be simultaneously cured. I never find that the one materially delays the other.

Fistula is not so common a complication, but I have often seen it. If the fistula be well marked there is no difficulty in the diagnosis; but if it be of the blind internal variety, or if the external orifice be very small and concealed, as it may be, by an external flap of skin,

it is quite possible to overlook it. I have frequently met with examples of this. I will relate a case in point. A gentleman consulted me by the recommendation of Dr. Risdon Bennett. His statement was, that three months ago he was operated upon for piles, and was pronounced by his surgeon to be cured; but he still had occasional pain and throbbing in the anus; there was also a constantly recurring discharge which soiled his linen; it ceased for a day or two and then returned. He had mentioned this to the gentleman who operated upon him, and had been told he was only suffering from a little weakness of the bowel, which would soon right itself; of this, however, the patient could not feel convinced, and he was alarmed, thinking that he would have a return of his hæmorrhoids. The frequent discharge and staining of his linen gave him great concern, and worried him to a degree which seemed almost absurd, and quite disproportioned to the gravity of his case. This I have often observed in persons of refined feelings. In hospital practice patients do not often complain of a discharge, unless it be very copious, or accompanied by pain. On a careful examination of this gentleman I detected, just at the verge of the anus, and hidden by a small tab of skin, a minute orifice; a fine probe passed into this and through a short sinus, not quite three-quarters of an inch in length, into the bowel. From the history of the case (there having always been the same purulent discharge) I had no doubt that this slight fistula had existed in conjunction with the hæmorrhoids, but the major malady had masked the minor one. I laid open this sinus, and in a week the patient was quite well and relieved from his annoying discharge.

Always when examining a case of hæmorrhoids pass

the finger well into the bowel to ascertain that no stricture, ulceration, or malignant disease is present. I have made the same remark before, but I do not mind repeating it, as I have so often seen this grave error committed. It has many times occurred to me to find that patients have been operated upon in metropolitan hospitals by eminent surgeons, for piles, when all the time they were suffering from cancer or ulceration of the bowel. I need scarcely say that an operation under such conditions cannot be of any benefit to the patient.

Impaction or accumulation of fæces in the rectum or colon is another complication worthy of mention. I have said that, prior to operating upon a case of piles, the bowels ought to be thoroughly cleared; this is too often neglected. It is remarkable how much better patients do when the portal system has been unloaded by free purgation; and unless there be some care exercised in this matter you may occasion yourself a good deal of trouble, to say nothing of the suffering of your patient. For my own part, I am tolerably certain that, in the majority of those cases, where the healing process does not go on kindly, a loaded colon and congested liver is the chief cause. I was requested some time back by a professional friend to see a lady upon whom he had operated for slight internal hæmorrhoids, and in whom unhealthy ulceration had followed. Previous to the operation the patient was not in bad health, and might reasonably have been expected to do well. Before examining the rectum I inquired as to the state of the bowels for some time past, and from the account given I was quite satisfied that there had not been a good clearance effected. Moreover, although action had taken place since the operation, there had

been only scanty relief, and when the patient got out of bed and stood up, she experieneed inelination to go to stool, and abortive straining on doing so. On introdueing my finger into the bowel I found it quite bloeked up by hardened fæees. This impaction was got rid of by manipulation and enemata; then aperients were given by the mouth, and a large quantity of lumpy motion was evaeuated. When I saw this patient again in about ten days the ulceration was nearly healed.

Very reeently I operated for hæmorrhoids upon a young gentleman whose bowels, he said, generally aeted fairly, and had done so freely before the operation; but at the end of a week he eomplained of abdominal pains and desire to go to stool, without having a satisfaetory evacuation; this led me to examine his abdomen, and I found his eolon quite dull on pereussion, nearly throughout its eourse. A brisk purge administered daily for three days, and followed by enemata, produeed most copious aetion, and soon improved his general eondition, and hastened the healing of the wounds.

Another marked instanee of this eomplication oecurred in a lady recommended to me by my friend Dr. Daldy. She was a delieate person, who had long suffered from the common eombination of uterine and rectal disorder. She had a eonsiderable and painful prolapsus of the bowel when she eame under my eare, her uterine malady having been previously greatly ameliorated, if not eured. The bowels acted daily and, according to her statement, suffieiently. She had the usual aperient administered, and also an enema prior to the operation with good effect, but about the time of the separation of the ligatures she was seized with severe abdominal pains and straining, and on examination I found the rectum blocked up by hard, dry, friable

lumps of motion, which were with very great difficulty got rid of; after this aloetic aperients procured the evacuation of a really enormous collection of fæces, it seemed as if the whole colon had been fully charged. All this delayed her recovery, and caused a great deal of pain, but eventually she got well.

Procidentia of the rectum is rather a rare complication; for by this term I do not mean that prolapse of the lower part of the rectum which is so commonly associated with internal hæmorrhoids, and whence bad cases of piles are often called *prolapsus;* but I mean an invagination or descent of the upper part of the bowel through the lower. The distinction can readily be perceived by the practiced eye; the hard, slippery tumor forming the pile, presenting a very different appearance from the soft velvety-looking piece of intestine which protrudes with it. Moreover, there is a more or less deep sulcus between the intestine and the skin, which is not the case in ordinary prolapsus or piles. The procidentia may be of the whole circumference of the bowel, but most frequently it is one or other side of the rectum, and not either the anterior or posterior portion that descends. Of this peculiarity I have seen many examples; the operation upon the hæmorrhoids will generally cure it.

Polypus is sometimes found in conjunction with hæmorrhoids. I operated some time back on the wife of a well-known physician, who, in addition to hæmorrhoids, had a large-sized hard pedunculated polypus; and very recently, assisted by my colleague Mr. Goodsall, I operated upon a lady who had a fissure, polypus, and hæmorrhoids; her sufferings had been really very great, and she had lost much blood. In these cases a ligature must be placed upon the polypus as well as the piles.

CHAPTER VII.

HEMORRHAGE AFTER OPERATIONS UPON PILES.

This will occasionally take place, and it may be either accidental or secondary.

Just as in midwifery you may go on for years without the occurrence of an untoward event, and then get a batch of troublesome cases, so it is in this operation: you may perform it a large number of times without the slightest unpleasant symptom resulting, and then have a run of cases which cause you more or less of anxiety.

If the operation be carefully done, primary hemorrhage is very rare; occasionally, when large and very vascular hæmorrhoids are ligatured, and there is also much superabundant skin cut away, a small vessel will bleed when the patient recovers from the shock: this is a trivial matter, and a ligature is easily applied. But this, I think, will seareely ever oeeur if the precaution of putting on a good pad of wool and a T-bandage is adopted. Now and then, particularly if the patient has been unruly under the operation, the ligature may not be placed quite at the bottom of the incision, and some bleeding may then result. The ready way to arrest this is to draw down the bowel by the ligatures, the patient assisting you by straining. You will then in all probability be able to see the bleeding vessel and tie it. If you do not see it, or if a general

oozing is apparent, pass all the ligatures through a hole made in the middle of a small round sponge; then tie them across a piece of stick, and twist this round. In this way you construct a sort of tourniquet, and can make firm and strong pressure with the sponge, so that no bleeding can take place. In a few hours after it is all arrested, the stick may be removed.

In the old plan of operating with a double ligature and transfixion of the base of the hæmorrhoid, bleeding did not infrequently occur from perforation of a vessel — usually a vein — by the needle. When this takes place, on the ligatures being tied, the vessel would be more or less torn open, and bleeding would ensue at the time, or shortly afterwards.

I was called some time back to see a patient to whom this accident had occurred. It is easily remedied by drawing down the piles by the ligatures, and placing *one* ligature above the spot where the bleeding hæmorrhoid was transfixed.

In cases of sloughing hæmorrhoids, the parts are sometimes so much disintegrated that very free hemorrhage takes place; at the same time a ligature is not easily applied, in consequence of the tissues readily breaking down.

I once had a rather startling accident occur after operating. A gentleman came up from the country, and was operated upon by me for piles; it was a bad case, and five ligatures were applied. The night following the operation he was attacked quite suddenly with delirium tremens, and in a paroxysm of mania tore off three of the ligatures. The loss of blood was very considerable. When I arrived at the house, I found the patient, the bed, and the floor of the room smothered with blood I had much difficulty in plac-

ing ligatures on the bleeding vessels, as the patient, although very collapsed, was capable of offering resistance. Curiously enough, he did exceedingly well afterwards: I do not think it delayed his recovery a single day. He had not been an habitual drunkard, but the fear of the operation induced him, for about a week before he came up to undergo it, to drink quantities of champagne and brandy. This, with the chloroform and the shock of the operation, brought on the acute delirium.

Another case of accidental hemorrhage occurred to a patient of my friend Mr. Blackman, of Aldgate. I operated for him upon an elderly gentleman who had a very large hæmorrhoid, which had undergone fibroid degeneration; it was situated dorsally, was as large as a hen's egg, and always came down at stool, giving a great deal of trouble. Ulceration had taken place at the upper part of the pile. I placed a ligature upon it, and then cut the tumor off. At the time of tightening the ligature, I felt that the tissues were very friable, and I examined the site of the ligature to see if it had cut through much, but could not discover that it had done so, and there was no bleeding. When I saw the patient in the morning with Mr. Blackman, we found that considerable hemorrhage had taken place since 4 A.M., the cause being probably as follows: he had not passed any water, and feeling very urgent desire, he jumped quickly out of bed, and strained violently to empty his bladder; at the time he was doing this, he felt something give way in the rectum, and, on getting back into bed, his wife observed that he was bleeding. I forcibly dilated his sphincter, and then with a vulsellum drew down the bowel, and placed another ligature above the first one. This at once arrested the

bleeding, but the next day but one it recurred to an alarming extent, and I found the parts so soft and sloughy that no ligature would hold; under these circumstances, I plugged the rectum (in the manner I will presently describe). This plug was retained for about ten days, and he had no more hemorrhage, and eventually did well, although for some time he gave Mr. Blaekman and myself no little anxiety.

I will relate one more case. In the year 1866 I operated at St. Mark's with the clamp and cautery upon a really severe case of internal hæmorrhoids. The parts were very vascular, and I had considerable difficulty in controlling the hemorrhage, having to apply the cautery a good many times. When the patient left the operating table, there was no bleeding at all; but in the evening I was sent for by the house-surgeon, as very free arterial hemorrhage had come on. The patient was very timid and the parts very tender, so that I had much trouble to introduce a speculum; and when I did, I could not find the spot whence the blood came. I ordered the injection of ice-water and perchloride of iron; this had the effect of arresting the flow, but only temporarily.

When I saw the patient early in the morning I was told that he had lost a good deal of blood during the night, and the flux was still going on, so I determined to find the vessel if it were possible. Accordingly I passed my finger into the bowel, and on that I guided a vulsellum, and, catching a good hold of the rectum, I pulled that part down; while that was held, I used another vulsellum on the other side of the bowel, and thus succeeded in bringing the inside of the rectum well into view. This done, I found two points from

which the blood escaped in jets, so I placed ligatures upon these vessels, and the hemorrhage was arrested.

I leave the reader to imagine how much pain the patient must have suffered from this proceeding. He had such a tendency to faint that I was afraid to give him chloroform.

These cases may, I think, be correctly styled accidental hemorrhage. As a rule, I should say what we have most to fear is *secondary* hemorrhage, which usually comes on at or about the time of the separation of the ligatures. This form of bleeding occurs generally in elderly people of broken-down constitutions, or in those who have been very free livers. I may say, as far as my experience goes, that this hemorrhage is almost always venous; there may be some slight arterial bleeding also, but the chief loss is venous. Of course there are exceptions to the rule of its occurrence in elderly people; here is one:

A gentleman, æt. 23, had all his life suffered from rectal disease; when a child from procidentia, and by the time he was eighteen from bleeding hæmorrhoids. When I saw him he had a prolapse of the lower part of one side of the rectum, which came down on very slight exertion; he was very thin and weak, and subject to fainting. I put two ligatures upon his prolapsus, assisted by my colleague Mr. Goodsall. Mr. Buxton Shillitoe administered the chloroform with his usual care and discrimination, and although very little was given, and the operation did not take one minute to perform, the patient fainted, and we had considerable trouble in recovering him. I was quite convinced that

had the chloroform been given recklessly or unskilfully death would have ensued.

This gentleman went on very well indeed until the sixth day, when the ligatures came away on the bowels acting. Soon after this—he had returned to his bed—he said he felt faint, then that he wanted to go to stool, and on being assisted up to do so he nearly filled the pan with dark blood and fainted away. I was sent for in great haste, and directly saw that he had lost and was still losing a large quantity of blood. This was not a case in which one could afford to temporize, so I at once plugged his bowel with cotton-wool and persulphate of iron, which I had with me. I was quite sure that it was no use to search for the bleeding vessel or vessels. The plugging immediately arrested the hemorrhage, and I kept the wool in for ten days; I then carefully removed it, and no further bleeding took place. The patient soon got quite well. This is the only case of severe secondary hemorrhage I ever had in a young person.

An elderly gentleman came from the country to be under my care. He had been much in hot climates, had led rather a dissipated life, and worked very hard. He was only fifty-four, but he looked sixty-five at least. He suffered from a constantly prolapsed hæmorrhoid; I saw no reason why it should not be removed; accordingly I applied a ligature in my usual way. The patient did capitally until the fifth day, when the ligature came away on his going to stool. I saw him in the afternoon and he was very comfortable, and said he should get up and lie on the sofa. I made no objection, and he did so.

At night I was summoned hastily, as he was bleed-

ing; when I arrived I found him quite collapsed, and the blood was literally pouring out from his rectum. It had come on suddenly when he was moving from his sofa in the sitting-room to the bedroom on the same floor. I plugged instantly and arrested the bleeding; he suffered a good deal of distress from flatulence, and I was compelled to remove the wool and sponge on the sixth day. To my intense annoyance, after twenty-four hours the hemorrhage recurred quite as badly as at first. I was thus compelled to replug the rectum, but this time, not wishing to remove the plug early, I adopted the precaution of introducing a full-sized elastic catheter at the side of the wool, so that he was able to get rid of flatus through it. This was all retained for nineteen days, when I gradually and carefully drew the plugging out; there was no further bleeding. I am free to confess that this was a very anxious case.

A man, æt. 62, was operated upon by me at St. Mark's Hospital, in July, 1868. He was a feeble man, and had no power in his sphincter muscles. He suffered from prolapsed hæmorrhoids, which were always down. I used the clamp and cautery.

On the fourth day hemorrhage commenced after action of the bowels; at first it was small in quantity, and passed only when he moved or coughed; it came away fluid, and also in small clots; it was venous in character. Ice water with perchloride of iron was injected, but failed to arrest it. When I saw him he was very pale and faint, and the hemorrhage was nearly constant, the blood slowly trickling out of the anus. On examination I found the bowel full of blood. I plugged the rectum fully with cotton-wool, into which was dusted the persulphate of iron; this at once stopped

the bleeding. The plug was retained for six days, and when it was removed there was no return of hemorrhage. This patient was very weak and ill for some time, and he suffered from an attack of purpura. Good diet and stimulants rallied him, and he left the hospital quite recovered. I have had several more very similar cases to those I have described, but I do not think there is any necessity for my giving them in detail.

When bleeding is taking place internally and from tightness of the sphincter it does not escape; the patient will always tell you "that he feels something running inside the bowel," and this may continue until the rectum (and even the sigmoid flexure) is full of clots and fluid blood. If you suspect this and pass your finger into the anus you will excite contraction of the gut, and the contents will then be expelled with more or less force. The trickling sensation I always take as a pretty certain indication of internal bleeding, and I act accordingly. These cases do very well if prompt and judicious treatment be adopted. I have never lost a patient, although I have seen persons in considerable danger. If the bleeding were allowed to continue long, I have not the slightest doubt that a fatal issue would be the result; so I will in some detail describe the method of treatment I consider most advisable.

I have found it utterly futile, in cases of secondary hemorrhage, to try and ligature the vessels; it is usually the large veins or venous sinuses which are opened by sloughing or ulceration, and when you introduce a speculum and try to find the source of bleeding, you can only see that the whole rectum is filled with blood, and on passing your finger you will feel a quantity of clots.

When called to cases of hemorrhage always arm

yourself with a full-sized, bell-shaped sponge and plenty of cotton wadding; take also some persulphate of iron, or if you have not that, powdered alum. Thread a strong silk ligature through, near the apex of your cone-shaped sponge, and bring it back again, so that the apex of the sponge is held in a loop of the thread. Then wet the sponge, squeeze it dry, and powder it well, filling up the lacunæ with the iron or alum. Pass the forefinger of your left hand into the bowel, and upon that as a guide push up the sponge—apex first—by means of a metal rod, bougie, pen holder, or a rounded piece of wood, if you can get nothing better. Now, this sponge should be carried up the bowel at least five inches, the double thread hanging outside the anus. When this is so placed fill up the whole of the rectum below the sponge thoroughly and carefully with cotton-wool well powdered with the alum or iron. When you have completely stuffed the bowel, take hold of the silk ligature attached to the sponge, and while with one hand you pull *down* the sponge, with the other hand push *up* the wool. This joint action will spread out the bell-shaped sponge, like opening an umbrella, and bring the wool compactly together; if this is carefully done no bleeding can possibly take place either internally or externally. Half measures in these cases are worse than useless, as valuable time is thereby lost. This plug should remain in at least a week, and it may be retained a fortnight or more. It may be thought that much straining and pain would be caused by it. I assure you this is not the case; if you keep your patients fairly under the influence of opium they very rarely complain. The only trouble may be wind, and this often will find its own way out. If you fear this, and have a male catheter or flexible

tube handy, you may introduce it through the centre or by the side of the sponge, packing the wool around it. I have done this several times, and found the patients not only passed wind through it, but broken-down blood and liquid fæces. I am sure you need never fear a case of hemorrhage if you only plug methodically and thoroughly. I think very highly of the persulphate of iron; no styptic, in my opinion, answers as well. It is far superior to the perchloride, as it does not cause burning or pain. In very slight cases of bleeding the injection of ice-water, keeping a lump of ice on the sacrum, and the patient cool and quiet, may be sufficient, but I say *never leave* a patient who has at all continuous or free hemorrhage without the plug.

The after-treatment of these cases requires considerable care and attention to details; generally the patient is very greatly alarmed at the bleeding, but this will be soon allayed when he finds you are prompt and confident of your own powers to succor him. After the hemorrhage is arrested by the plugging the recumbent position must be maintained, and on no account whatever should an upright posture be assumed. Frequently retention of urine occurs; it is well, therefore, I think, to introduce a self-retaining catheter at once, which saves the patient further disturbance. The buttocks and lower part of the back should be kept cool. I employ dry cold, by means of ice in an India-rubber bag, applied to the sacrum. If the patient is exceedingly collapsed, of course stimulants may be given, but it is better, if possible, to wait for some hours and observe what amount of reaction takes place; this is sometimes considerable, and will make you wish that you had withheld alcohol or used it very sparingly. As soon as it can be taken, nourishment is to be given, and Liebig's

cold soup, which can be quickly prepared, I have found a wonderful restorative.* Hot liquids, I need scarcely say, are to be avoided. I do not think it necessary to keep these patients entirely on fluid diet; directly they can take solid food let them have it, but it should be nourishing and easy of digestion. As secondary hemorrhage generally occurs in persons whose blood and tissues are deficient in plastic material, the aim of treatment must be to remedy that defect, and thoroughly nutritious food judiciously administered is, I imagine, the most valuable means to that end.

I do not place much trust in the internal use of astringent remedies, but I always prescribe iron, not only as a hæmostatic, but, for its blood-repairing property. I prefer either the Tinct. Ferri Muriatis, P.L., or the Liq. Ferri Peracetatis. If the stomach bears this well full doses may be given twice or thrice in the day; in addition, a pill containing one grain of solid opium night and morning, or at night only if the bowels do not exhibit any tendency to act and there is no straining, will generally meet the requirements of the case.

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* Liebig's cold soup is prepared thus: Take 8 oz. of raw lean beef, finely minced, put it in 20 oz. of cold water, add 10 drops of strong hydrochloric acid and a little salt; let it stand half an hour, and then strain. One or two ounces may be given every half hour.

CHAPTER VIII.

FISSURE OR PAINFUL IRRITABLE ULCER OF THE RECTUM.

This is an excessively painful and by no means uncommon affection; it is more frequently found in women than in men, although not rare in the latter. I have seen fissure in a baby in arms and in an old woman of eighty, in whom it was associated with an impaction. By far the most usual position of fissure is dorsal or nearly dorsal, although it may be perineal or lateral. It may be brought about by an injury or tearing of the delicate mucous membrane at the verge of the anus; so one cause is straining and the passing of very dry, hard motions; sometimes it follows severe diarrhœa; it is frequently the sequel of a confinement, and the accompaniment, and probably result, of polypus. The origin of many fissures is syphilis. As a rule fissure is supposed to be hæmorrhoids; patients tell you that they have a discharge of blood and matter, a swelling outside the bowel, and pain at stool, and they believe they have piles. Unfortunately, not infrequently the medical attendant is satisfied with the patient's diagnosis, and treats the case as one of external hæmorrhoids.

I should say, generally when a patient complains of great pain on defecation that it is not piles he is suffering from, and certainly not uncomplicated piles.

In fissure the pain on the bowels acting is more or less acute; some describe it as like tearing open a

wound, and doubtless it is of a very excruciating character. I have known patients who for hours could not bear to stir from one position, the least movement causing an exacerbation of the pain. This agony induces the sufferer to postpone relieving the bowels as long as possible, the result being that the motion becomes desiccated and hardened, and inflicts more grievous pain when at last it has to be discharged. After action of the bowels the pain may in a short time entirely cease, and not return at all until another evacuation takes place, but often it continues very severe, of a burning character, or it is a dull, heavy pain, with throbbing which lasts for hours, sometimes even all day, so that the patient is obliged to lie down, and is utterly incapable of attending to any business. In some instances the pain does not set in until a quarter or half an hour after the bowels have acted.

In children and young persons, unless a polypus complicates the fissure, I think it is almost always curable without operation. I have had many cases resembling the following:

A child, æt. 4½, admitted into St. Mark's, September, 1867. For twelve months or more he has been subject to procidentia every time his bowels acted; he is usually rather constipated. About five or six months ago he began to suffer pain, which lasted for hours after the bowels had been relieved; this was so severe that he screamed and rolled about in his bed; he often passed a little blood; the pain was much aggravated when he was costive. On an injection being given, the rectum came down, and a very distinct fissure with a papillary growth at its commencement was seen. There was no polypus in the bowel; Ung. Zinci with extract

of belladonna and opium to be used night and morning, and confection of senna with sulphur to be taken to keep the bowels gently acting. This prescription afforded immediate relief; in three weeks the ulcer was healed and the child perfectly cured.

Fissure, although really so simple a matter, and its cure generally so easy, wears out the patient's health and strength in a remarkable manner; the constant pain and irritation to the nervous system is more than most persons can bear; I have frequently seen women suffering from small anal ulcer, who thought they must have cancer in consequence of their extreme illness and pain. What under these circumstances is very extraordinary is the length of time people go on enduring the malady without having anything done for it. It is not an uncommon thing for one to see fissures of years' duration, especially in young women, who through delicacy of feeling often conceal rectal affections.

The usual position on the side is the best for making an examination. Let the patient raise the upper buttock with the hand, then with your forefinger and thumb gently open the anus, at the same moment telling the patient to strain down; you will then be able to see just within the orifice an elongated, club-shaped ulcer; the floor of it may be very red and inflamed, or, if the ulcer is of long standing, of a grayish color with the edges well defined and hard. Frequently the site of the fissure is marked externally by a small clavate papilla or minute muco-cutaneous polypoid growth; this must not be confounded with ordinary polypus, and it is not the *cause* of the fissure, but the *result* of the local irritation and inflammation which has been going on. Sometimes the situation of the fissure is in-

dicated by an inflamed and swollen piece of skin, and the fissure in this case not infrequently ulcerates through the portion of integument and forms a small but extremely painful fistula. It occurred to me to observe this recently in the wife of a medical man. When I first examined her I found she had well-marked fissure and an inflamed piece of skin close to the anus. I predicted that the ulceration would perforate this, and so it did, for in about ten days when I went to operate upon her, I found a small fistula had formed.

Occasionally, on proceeding to examine a patient the first thing you see is the small club-shaped papilla I have already mentioned, protruding from the anus; you may then be certain that an ulcer exists. I may here mention that when operating this growth ought to be snipped off, or the case will not do well, as it falls down into the wound and retards or quite prevents healing.

Fissure is very commonly associated with uterine misplacement. I have stated that operations upon hæmorrhoids under similar conditions are not satisfactory; the same observation applies with quite as much truth to *fissure* and uterine disease. I have had reason to repent many times interfering with these cases. The successful treatment of the uterine disorder may be sufficient to cure the fissure (if no polypus exists), or at all events the ulcer will afterwards yield to local applications and general treatment. If the fissure should be benefited by operation, as long as the uterine malady exists, there will be a constant danger of a relapse taking place. The most common forms of uterine displacement in connection with fissure are, according to my experience, anteversion and retroflexion, and associated with these I have frequently observed affections

of the bladder, chronic cystitis, and spasmodic pains in micturition. When you find these three disorders united, depend upon it you will have a case that will call for all your skill and patience to bring to a successful issue.

Gelatinous and fibrous polypi are not at all uncommon complications of fissure. The polypus is usually situated at the upper or internal end of the fissure, but it may be on the opposite side of the rectum. Here is a case:

Mary G—, æt. 47, was admitted into St. Mark's April, 1871. She had a well-marked and very painful fissure near the anus. There was no polypus to be seen, but on passing my finger into the rectum I found a pedunculated fleshy polypus on the opposite side of the bowel to that on which the fissure was situated. I am quite confident that had I incised the fissure and left the polypus, this patient would not have recovered.

If you do not remove a polypus at the time you divide the ulcer, failure is certain to result, as I have myself seen many times.

If the fissure is of recent origin, it may often be cured without operation, especially if it be situated towards the perinæum. In women this can almost certainly be accomplished. Of all the varieties of fissure, the syphilitic is most amenable to general treatment; when of syphilitic origin, they are often multiple. I have seen three distinct well-marked fissures in one patient. My colleague, Mr. Alfred Cooper, had a case of the kind not long ago at St. Mark's. I may here mention that if you are obliged

to operate upon a multiple fissure, *one* incision through the sphincter will be sufficient.

Now as to the treatment. In all cases, rest in the recumbent position should, as much as possible, be adopted. Mild laxatives should be given, not to purge but to keep the bowels acting once daily; this may sometimes be effected by diet alone. The domestic remedy of figs soaked in sweet oil, or onions and milk at bedtime, may be sufficient. I often order a combination of equal parts of the confection of sulphur and confection of senna; small doses of sulphate of magnesia or potash, half a tumbler of Pullna or Friedrichshall water taken in the morning fasting, are all worth trying, and you must be prepared to alternate the medicines as one or other seems to lose its effect. All drastic purges should be avoided, but I do not object to small doses of the aqueous extract of aloes, especially when combined with nux vomica and iron. If the patient can so manage as to get the bowels to act the last thing at night, it is better than in the morning, as the rest is very beneficial and the pain does not continue so long when lying down. After the action, ℥ss. of Liq. Opii sedativus may be injected with ℥j of cold starch. This is especially valuable if the patient has the bowels relieved at bedtime. As an application, I know nothing better than the following ointment: Hydrarg. subchloridi, gr. iv; Pulv. Opii, gr. ij; Ext. Belladonnæ, gr. ij; Unguent. Sambuci, ℥j—to be applied frequently. I have effected many cures with this ointment alone. An occasional very *light* touch with the nitrate of silver (not to cauterize but to sheathe the part with an albuminate of silver) is useful, and it relieves pain for some time. If there be very great spasm of the sphincter, extract of belladonna may be thickly smeared around the anus

over the muscle, and this I have at times found effective. If ointments do not agree with the sore, lotions may; Goulard-water with opiates and sedatives may afford some temporary relief; but one must acknowledge that the best devised and most carefully carried out general treatment frequently fails, save in very favorable cases.

In my opinion, if the base of the ulcer be gray and hard, and if on passing the finger into the bowel you find the sphincter hypertrophied and spasmodically contracted, feeling as it often does like a strong india-rubber band with its upper edge sharply and hardly defined, nothing but the adoption of such means as will utterly and entirely prevent all action of the muscle, for a greater or less length of time, is likely to effect a cure of the fissure.

Some authors specify the time at which this disease may be curable without operation, and say, "If it has existed more than three months, the attempt is hopeless;" but really the time is not of importance: the question is, what pathological changes have been brought about? I have cured fissure of months' standing when there was no great hypertrophy of the muscles. Here are some cases.

Mrs. E—, æt. 24, was sent to me by Dr. Simpson, of the Old Kent Road. Five months ago she was confined with her first child after a somewhat lingering labor. The first time the bowels acted she had pain; and ever since then she has never had an action without suffering. This has been gradually increasing, and now her life is almost unendurable; the pain lasting for hours, and compelling her to lie down, so that she is quite incapable of attending to her household duties.

On examination, a very characteristic dorsal fissure was seen; there was no polypus or piles. The rectum was generally healthy, and there was not very marked spasm or thickening of the sphincter. The bowels were confined. Ordered Magnes. Sulph., ℥j; Ferri Sulph., gr. j; Acid. Sulph. dilut., ℥v; Inf. Quassiæ, ℥j, ter die; and to use the following ointment: Ung. Hydrarg. subchlor., ℥j; Ext. Opii, Ext. Belladonnæ, āā gr. iij; to be applied after action of the bowels and also at night. I touched the ulcer every other day with a solution of perchloride of mercury. In a fortnight the fissure was nearly healed, and she had scarcely any pain after defecation. Soon after this I heard she got quite well.

A city dignitary consulted me some time back, on the recommendation of Dr. Sedgwick Saunders. His history was that for eighteen months or more he had suffered pain on defecation; at times he was much better and only experienced uneasiness, and then again the pain returned as bad as ever. Homœopathy had been tried for some six or seven months, and he had derived benefit as far as his constipation was concerned, but the pain was no better. He had cultivated the habit of getting his bowels to act about six o'clock in the morning, so that afterwards he could return to bed and lie quiet for a couple of hours; he was then able to get up and come to town by train without suffering much; but if he had to travel soon after visiting the water-closet, he was in pain all day. He was very careful in his diet, drank very little wine, and was accustomed to take oatmeal porridge, brown bread, fruits, and vegetables, which I dare say had more effect on his bowels than the globules of nux vomica to which he attributed his regularity. As he laid very

much stress upon the use of these globules and was strongly of opinion that he would have no action without them, I did not oppose their continuance, knowing, as I well do, how much the belief that a certain drug is beneficial tends to make it so. On examining this patient I found a small circular perineal ulcer situated at the upper edge of the external sphincter: it was clean cut and inflamed. The rectum was otherwise healthy, and the sphincter was not much hypertrophied. Taking into consideration the length of time the ulcer had existed, I advised incision; but that he would not listen to, so I prescribed my usual ointment, but was speedily obliged to leave out the extract of belladonna, as he was so sensitive to the action of this drug as to get dry mouth and dilated pupils, with affected vision, in twenty-four hours after applying it. After three weeks I found the ulcer was not any better, although I had varied my treatment, touched it with nitrate of silver, perchloride of mercury, &c.; he had also used lotions of the tartrate and persulphate of iron. I had observed that there was one minute spot most excessively tender, much more so than the rest of the sore. There no doubt was an exposed nerve, so I took a hint from Mr. Hilton's work on "Rest and Pain," and applied once some acid nitrate of mercury. From that day the ulcer rapidly healed, and soon this gentleman got perfectly well. I know that he continues so to this day.

I may here remark that I have several times had a similar success from the fuming nitric acid, but I prefer the acid nitrate of mercury.

A lad, æt. 19, came to me at St. Mark's with double

fissure; both the ulcers were very well marked, and there was one on either side of the anus. He suffered the greatest pain for hours after defecation. On examining him I found that he had syphilitic rash—squamous and coppery; his tonsils were ulcerated, and he had also enlarged and hardened glands in his groin. He admitted that he had suffered from a sore on his penis, and had been treated for it at St. Bartholomew's Hospital: he did not know whether he had taken mercury or not. The sore had been well about five months, and the pain on going to stool had existed for four months. The rectum was healthy, and there were no mucous tubercles. I put him on a course of bichloride of mercury and tonics, as he was much out of health; he took the hospital confection to keep his bowels gently acting, and used strong calomel ointment with powdered opium; after three weeks' treatment the fissures had quite healed, so then he ceased to attend, although his syphilitic symptoms had not disappeared.

I have headed this chapter "Fissure, or painful irritable ulcer," because the symptoms and treatment do not differ whatever form the ulcer assumes, whether it be elongated and club-shaped, oval, or circular, but as a rule the small circular ulcer is situated higher up the bowel than fissures are, which generally extend to the junction of the mucous membrane with the skin; the ulcer being more commonly found above or about the lower edge of the internal sphincter ani. I think also that in the circular ulcer there is less severe pain at the moment of defecation, but it comes on from five minutes to a quarter of an hour after that act, and then is quite as intolerable as that resulting from the fissure. These minute ulcers are more difficult to find than the fissures,

as they often cannot be seen without the use of a speculum, or getting the patients to strain violently, which they will not do for fear of exciting pain; in fact, they generally draw up the anus as much as they can when you are examining them. An accustomed finger detects these ulcers directly; they feel much like the internal aperture of a fistula, but the edges are harder, and therefore more defined, and there is no elevation above the surface of the surrounding mucous membrane, as is frequently the case in fistula. They often become blind internal fistulæ.

There has been a controversy at various times as to the depth of incision necessary to cure a fissure, some advocating a slight cut and others a free one. There is no doubt in some cases a very superficial incision through the base of the fissure, so as to divide the fibres of the muscles immediately beneath the ulcer, or even to cut through an *inflamed filament of nerve*, may be enough; but, on the other hand, I have frequently seen slight incisions fail, and I am confident that a tolerably free one, sufficient to secure the relaxation of the sphincter, and put the parts entirely at rest, is by far the safer plan.

I do not mean by this that you need cut right through both sphincters into the cellular space beneath, as the older surgeons used to do, but I am sure that a fairly free incision heals quite as quickly as a small one, and that it is much better to cut rather too deeply than too superficially.

You may be confident that your patient will not readily pardon your not curing him at the first operation, and will be very disinclined to submit to a second incision should the first have failed. Most likely he will take himself out of your hands, and seek other

advice; it has occurred to me to have to operate upon patients, both hospital and private, where eminent surgeons had failed to effect a cure, and I have found that failure had resulted from one of two causes, either the too sparing use of the knife, or the overlooking of a polypus.

When operating, if not very *au fait* at rectal surgery, I should advise you to introduce a speculum; you then see exactly where your knife should go, and also the parts are rendered tense, which facilitates their division; the incision should commence a little above the upper end of the fissure, and terminate a little beyond the outer end, so that the whole sore is cut through; as a general rule the depth of incision should not be less than a quarter of an inch. If the outer end of the fissure be marked by a swollen inflamed piece of skin, it is better to remove that with a pair of scissors, by this the healing process is greatly expedited; the small *polypoid* growth also, so frequently found in fissure, should at the same time be snipped off. Please to note that I am not recommending the cutting off of true rectal *polypi*.

It has been suggested that a curved bistoury may be passed beneath the ulcer, and the cut made from beneath towards the bowel. I do not see any advantage in this mode of operating; for my own part, I always insert my forefinger into the bowel, feel the situation of the fissure, pass upon my finger a straight knife with a rounded point, then turn the edge to the base of the ulcer and make the incision; or the knife-blade can be laid flat upon the forefinger and both introduced together into the bowel, and the cut then made; this is a good plan where there is much spasm of the sphincter. When the fissure is quite dorsal, the cut should

not be made directly through it, but rather laterally, by which means you are certain of completely dividing the fibres of the muscle, and the wound will heal more readily. A small piece of cotton-wool may be placed in the wound, and allowed to remain for twenty-four or forty-eight hours. It is well to keep the bowels confined for three days.

Usually there is no occasion for the patient to keep in bed, but it is advisable that much exercise or standing about should be interdicted; a few days on the sofa is, in simple cases, all that is required. The reverse of all this is absolutely necessary when there is any uterine complication; the patient here must be kept entirely at rest and lying down until the wound has soundly healed, for, most assuredly, if she gets about too soon, either the wound will not close, or worse than that, unhealthy ulceration will ensue. I have seen many cases showing the good policy of long-continued rest, and numbers more where bad results have followed a speedy resumption of ordinary duties; on this point I could relate numerous illustrative cases, but one shall suffice.

Ada T— was admitted into St. Mark's Hospital August, 1866; she was twenty-four years of age, was married, and had five children; she was in the hospital three months ago, and was operated upon by Mr. Lane for fissure; she left not quite well. It was noted on her card that she suffered from retroversion, and had an enlarged uterus—on examining her, on her readmission, rather extensive, but superficial ulceration was found to have taken place since her going out. The ulceration extended above the upper edge of the internal sphincter. She had a good deal of pain and fre-

quent harassing diarrhœa. There was no history or sign of syphilis. After three months' treatment by injections, sedative and astringent, and the internal administration of iodide of potassium and tonics, she was discharged cured. The uterus was kept in its place by means of a pessary.

These fissures or irritable ulcers not very uncommonly give rise to a train of nervous and hyponchondriacal sensations which continue even after the ulcer itself has healed. I have seen examples of this in both hospital and private practice, and both in men and women. An elderly maiden lady has been seen by me at various times for the last four or five years, her history being that, fully five years back, she had a small painful ulcer situated over the upper part of the internal sphincter muscle, which was much hypertrophied and spasmodically contracted. A limited division of the muscle failed to effect a cure, and, after six months' trial to get the ulcer to heal, I again operated, this time assisted by my friend Dr. Crosby. I made a very free incision through both muscles, and after that there was no difficulty; the wound healed thoroughly and soundly; but ever since then, although there is not the slightest lesion of the bowel, I have often examined her with both speculum and endoscope in the most thorough manner to be sure of that fact; she frequently, indeed almost constantly, complains of her old pain. There is a burning, uneasy sensation in the bowel, but no local tenderness to touch. She cannot walk about much, nor sit long in one position, nor ride far in any vehicle without suffering. She is stout, looks well, and her general health has not suffered. There is no discharge of any kind, mucous, purulent,

or bloody; and, as a rule, she does not have pain on defecation. There is no abnormal redness or heat of the bowel, although she always has the sensation of great heat in the part. She has no uterine affection (two eminent obstetric physicians have examined her and say so), and she has ceased menstruating some years. Now, what is the matter with this patient? Some may call it neuralgia or hysteria; but it has resisted all the usual remedies prescribed for these complaints, including hypodermic injections of morphia and quinine; in fact, she has taken all kinds of remedies prescribed by other medical men as well as myself. I have two ideas as to the cause of suffering in this case: the first is, that it is possible that some filament of nerve is included in the cicatrix of the wound, and thus irritation or inflammation is kept up, as one sees occasionally after amputations of the extremities; the second idea is, that her mind has been dwelling for so long a time on the state of her bowel that, although now there is nothing organically the matter with her, she retains the power, by mental concentration, of reproducing the sensation of pain in the old spot. This may not be the correct explanation, but there is some evidence, I think, tending to show that it possibly is so; for instance, the pain is not always consistent in its behavior; the bowels act generally without pain; the pain does not come on directly after defecation, but some hours after; sometimes the pain sets in before the action, and is removed or relieved by the bowel being emptied (a condition of things quite inconsistent with true ulcer or fissure). Then, again, when the patient is occupied pleasantly or intently, she has no pain, but it can be produced immediately by excitement of a disagreeable kind; it is also uncertain in its

coming and going, as well as in its character; sometimes it is smarting, then burning, as if the rectum was very hot; at another time pulsation is the chief annoyance, or the bowel may feel quite plugged up as if the anus was swollen; and then suddenly the pain is lancinating, causing her to call out: all this leads me to think that the pain is mental. Whatever may be the explanation, the fact is clear that here is a person who has no discoverable lesion of structure in a part, constantly suffering almost all the pain and misery which was formerly induced by a marked organic disease. I have not related this case because it is unique; I have seen others precisely similar both in men and women. I know for years I was tormented at the hospital by a man, perfectly healthy and strong-looking, who used constantly to attend the out-patient room complaining of a dreadful burning and painful sensation in the rectum a little way from the anus; he said it kept him awake at night, haunted him all day, was never out of his thoughts, and made his life utterly miserable. I examined him many times and could never detect anything abnormal (he had been operated upon for fissure years before I saw him by the late Mr. Salmon); there was no redness, no discharge, and the thermometer showed no excessive heat; in fact, there was nothing to see or feel. No remedy did him any permanent good, but he was always a little benefited by a fresh one. He used to leave me every now and again and go to one of my colleagues, and glad I was to be quit of him, but in a few months he was sure to come back, and not a whit better for what had been done for him. I called the malady hypochondriasis, but I suppose that was only saying in a long word that I did not understand what was the matter with him. I can em-

phatieally say that such patients are about the most unsatisfactory you ean have.

Why are ulcers near the anus so very painful, while those situated higher up the bowel are not generally so? There are two reasons whieh suggest themselves at onee: 1st, the great mobility of the external sphineter; 2d, the supply of nerves. The lower part of the reetum and the anus are very fully supplied by branches from the posterior and anterior saeral plexus, and more espeeially from the pudic. These nerves send numerous branches between the fibres of the sphineters and immediately beneath the mueous membrane; thus very superfieial ulceration exposes the nerve, and the slightest toueh, contraetion, or stretching of the sphineter eauses intense pain. If you earefully examine one of these uleers you will usually find one or more spots that are most exquisitely tender; this is where the nerve is exposed. The lightest drawing of the knife aeross the ulcer, if done at the right point, will be sufficient to divide this nerve, and to induee cessation of the pain for some little time; but the musele beneath being irritated and hypertrophied prevents by its movements the uleer from healing, and very soon the pain will be re-established; henee the neeessity in all but the slightest eases for the division of the sphincter. When the muscle is cut the divided fibres retraet, and they do not unite so quiekly as the uleer heals; the result is, the muscle being set quite at rest, soon loses its hypertrophy and irritability. I have often notieed, after a fissure has been eured, how mueh reduced in size and thiekness both the sphincters have beeome. The eause of failure after imperfeet division of the fibres of the musele is, that entire quiet is not obtained; the undivided fibres, though paralyzed for a time, soon reeover themselves,

and the old contraction is resumed before the ulcer has had time to heal, so that very speedily it reassumes its former character.

A great many apparently anomalous symptoms are produced by small painful ulcers of the rectum—retention of urine, pain in the back, pain and numbness down the back of the legs, leading to unfounded fears of paralysis, may be mentioned as not uncommon. When in a fissure the nerves are exposed the pain is most acute at the time of an evacuation; when they are not so exposed the pain generally sets in shortly after the action in consequence of the irritation to the sphincter. In many of these ulcers an examination with a magnifying glass has shown me the fibres of the external sphincter laid quite bare. Patients sometimes tell you that the first time they suffered pain was after a very hard motion, when they felt something give way with a crack.

Dr. Dolbeau, of Paris, considers the essence of this disorder to be neuralgic, and defines "fissure of the anus, as being a spasmodic neuralgia of the anus with or without fissure." He states that he has seen cases where all the intense pain and agony of fissure was present, but there has been no structural lesion whatever. For my own part I cannot wholly subscribe to this view; out of the thousands of patients who have been under my care suffering from rectal diseases, I have never yet met with a case in which the persistent, regularly repeated, intense pain, commencing on the passing or immediately after the passing of a motion, which distinguishes fissure, was not associated with an anatomical lesion, though that lesion might be very slight and difficult to discover.

I have seen a good many nervous patients who com-

plained of severe rectal or anal pains, but still wanting in the essential characteristics of the pain of fissure. I have also observed cases of spasmodic contraction of the sphincter inducing obstinate constipation and attended with pain but not at all strongly resembling the fissural paroxysm; often a sudden spasmodic acute stab seems to run up the bowel just before action, but when the fecal mass is passed a feeling of relief and comfort is experienced. I do not say that neuralgia may not coexist with fissure and modify or aggravate the suffering, but I think if it was the essential cause of the pain I should be justified in expecting that it would occasionally yield to the internal exhibition of anti-neuralgic remedies, a result which certainly is not within the range of my knowledge. I am inclined, but doubtingly, to express the opinion that the one essential of the malady in its severest form is an exposed nerve, and that the spasmodic contraction of the sphincter excited by reflex irritation occasions the peculiar character of the pain.

Dr. Dolbeau is strongly in favor of forced dilatation of the sphincter, originated by Recamier, in the treatment of anal fissure; in fact he scarcely admits of any other method.

The surgeon, he says, "introduces his two thumbs into the rectum and endeavors to bring them into contact with the two ischias; at that moment one hears a strong cracking noise, and the operation is finished." [The cracking noise proceeds, according to Dr. Dolbeau, from the tearing of the mucous membrane.] "The cure is thus complete after the operation, but it is not a lasting one, relapses often occurring; this is another argument in favor of the neuralgic nature of the complaint."

I have many times employed forcible but gradual dilatation of the sphincter when I wished to get readily at the interior of the rectum to remove impacted fæces or a polypus attached high up the bowel; but when I wrote the first edition of this work I had not frequently adopted Recamier's method in the treatment of fissure; since then, however, I have given "forcible dilatation" a fair trial, and I am by no means of opinion that it is generally so applicable or satisfactory in its results as incision.

I have found that laceration of the mucous membrane takes place to a considerable extent; twice I have rent a vein across and very free bleeding ensued; and lastly I can quite bear out Dr. Dolbeau's statement that relapses often occur. This is not my experience after incision. In cases of simple uncomplicated anal fissure, if the sphincter be once fairly divided, a recurrence of the fissure is a very rare event indeed; and this may, perhaps, be taken as some evidence against the neuralgic element in the disease.

The rare cases of spasmodic contraction of the sphincter, without fissure, may be well treated by dilatation, forcible but gradual. Some years back, on two occasions I divided the sphincter muscle subcutaneously for this condition, but I was not sufficiently pleased with the result to repeat the operation.

CHAPTER IX.

POLYPUS RECTI.

This disease was formerly looked upon as a very rare one; reeently, however, it has been considered rather more eommon, as it is supposed that in times gone by, reetal maladies not being so well understood, many eases of polypus eseaped diagnosis. At a meeting of the Pathologieal Soeiety in February last a gentleman stated that he had seen fifteen eases in twelve months. His, I think, must be a somewhat singular experienee. I find that I have noted altogether forty cases as having oecurred in my own praetice. My statisties at St. Mark's Hospital show that in 4000 eases of reetal disease there were only sixteen of polypus *without fissure*. There were fifteen eases of hemorrhage from the reetum, the causes of whieh were not aseertained; it is therefore just possible that some of these might really have been eases of polypus; but I do not think so, as I ean voueh for the faet that all these eases were examined with extra care before the ause of the bleeding was put down as "not aseertained."

It has generally been believed that polypi are mueh more frequently found in ehildren than in adults; this has not been the ease in my experienee, as twenty-three existed in ehildren under fourteen years of age, and seventeen in older persons.

By the word "polypus" I must be understood to mean a *pedunculated* growth attached to the mucous membrane of the rectum, and generally situated about an inch from the anus. I have seen them quite two inches up the bowel, but very rarely more than that distance. Usually the polypus grows from the dorsal portion of the rectum, but I have found them on the perineal and lateral segments. I think some surgeons call those small muco-cutaneous *polypoid* growths—which are so often found at the upper end of a fissure—polypi, and thus swell their statistics.

These polypoid excrescences, as I have mentioned before, do not originate the fissure, but arise from the irritation caused by the fissure; but the true polypus does sometimes produce fissure. I have proved this in more than one instance. Thus, I had a patient who for a long time had been the subject of a small fibrous polypus; it gave him but little or no annoyance, so he would not have anything done for it, but eventually he began to have pain on defecation, and on his coming to me I found that a fissure had formed. The removal of the polypus cured the fissure without any operation being required for that.

Polypi are usually described as being of two kinds: the soft or follicular, and the hard or fibrous,—the former being found in children and the latter in grown persons. I quite concur in the statement that the soft polypus is always the one found in young children, but I am of opinion that the fibrous variety is rare even in the adult. I believe that a pile which has undergone fibroid degeneration is often mistaken for a polypus. These piles, although they have a neck, are not distinctly pedunculated; and when they are extruded,

they can be seen to be continuous with the skin, and are not attached so high up the rectum as polypi are.

The polypi of children are small vascular tumors, with a pedunele often two inches long. They are about the size of a raspberry, and more resemble a small half-ripe mulberry than anything else; they bleed very freely at times, and occasion in the young great debility. When the pedunele is more than an inch in length, they usually protrude at stool, and require to be returned after the bowels are relieved. They are sure to be described by the child's mother as piles, or as "the body coming down."

The peduncle is sometimes so slender that it breaks on very slight traction, and I dare say many polypi separate by themselves when the child is straining or passing a hard motion, and so get spontaneously cured.

The microscopic structure of polypi varies, but generally they consist of a mass of fibro-nucleated tissue, supplied and overlaid with very thin-walled bloodvessels, the whole being covered, but scantily, with scaly epithelium. Lebert states that the epithelium is cylindrical; I have not noticed that it is so. In grown persons the structure is pretty much the same, but they are not so vascular, and they are also closer in texture, and often have a firm central mass or core, surrounded by a minute plexus of vessels. These polypi are not usually larger than in children, *i. e.*, about the size of a small raspberry; the pedicle is not always so long and slender as it is in the young. The fibroid polypus, in my experience, is quite rare, and those I have seen have been nearly as large as an English walnut. They resemble almost precisely a uterine fibroid in structure; they have usually short, thickish pedicles; they do not bleed, but if they come down

outside, or within the grasp of the sphincter, they are apt to get ulcerated and cause pain, irritation, and spasm: they also discharge an ichorous, ill-smelling pus. When this is the condition, fissure or an abscess is very likely to supervene. I have seen three cases of abscess and fistula produced in this manner. Altogether, I do not remember having met with in my own practice more than eight distinctly fibrous polypi. You may have more than one polypus existing in the same patient. Recently at St. Mark's Hospital I had a man with bad prolapsus, who had also twelve small but distinctly pedunculated polypi situated between the hæmorrhoids. In children I have several times met with two polypi.

The diagnosis of polypus has been stated to be difficult. I cannot see why myself; the history of the case and the symptoms will usually lead you to suspect what is the disease, and if you are careful to administer an injection and thoroughly search the bowel, you must feel or see it. When they have long pedicles, they slip away from the finger; but even then the peduncle at its attachment to the rectum can be readily felt.

The general symptoms are, in children, frequent desire to go to stool, accompanied by tenesmus, occasional bleeding, with discharge of mucus, and something protruding or appearing at the anus when the bowels are acting.

It is possible to mistake this disease for internal piles, procidentia recti, or dysentery. An examination after an injection will clear up the doubt in the first two cases; in the last, the absence of fever, abdominal pain, and the appearance of the motions are sufficiently distinctive indications.

In the adult the history carefully inquired into may be found peculiar. The patient will tell you that, without any previous marked discomfort in the rectum, he all at once discovered that a substance protruded on going to the closet. This is characteristic of the malady; until the peduncle becomes long enough to allow of the polypus being extruded or grasped by the external sphincter, but little or no inconvenience is felt. Therefore the onset of the disease is considered by the patient as sudden: this is quite different from the history of hæmorrhoids.

I cannot at all say why these growths should arise; they are not often connected with hæmorrhoids or any other diseases of the rectum, save fissure and intussusception. I have not even observed that constipation, that potent factor of bowel affections, obtains in these cases. I will relate a few cases of polypus, and then say a word or two about treatment.

Thomas B—, æt. 4, seen at the Farringdon Dispensary October 27, 1862. For more than twelve months has had what was supposed to be prolapsus of the bowel; he lost a good deal of blood at times, and was very feeble and anæmic. After an injection, there came down to the anus a spongy, irregular-shaped, bleeding mass, fully as large as a medium-sized walnut; it felt soft but not gelatinous. A tolerably long pedicle connected it with the anterior wall of the rectum. I applied a ligature and cut the polypus off. He was ordered an astringent draught to confine the bowels for a few days. November 1st. He took a dose of castor oil, and the ligature came away on the bowels acting. There was no bleeding. Discharged cured.

Jane H—, æt. 7, brought to St. Mark's Hospital, October, 1864. Her mother said that something came down when the bowels acted, and she bled a great quantity; she was obliged to put the substance back again. After an injection, *two* tumors made their appearance, and I at first thought it was a case of hæmorrhoids; but on closer examination, and passing my finger into the rectum, I found they were polypi, arising by two peduncles from quite an inch and a half up the bowel. One appeared to be attached dorsally, and the other laterally. I applied two ligatures and snipped off the growths. In three days the ligatures came away, and she soon was quite well.

Henry de C—, admitted into St. Mark's, March, 1866. He was six years old, and looked a very feeble, delicate boy. For two or three years he had lost blood at stool, and latterly something had protruded after an evacuation; it had to be returned by pressure. He had taken a quantity of medicine, and been treated at several public institutions. After an injection, a dark-colored, very vascular polypus came into view; it had a well-defined, rather thick neck. I ligatured and cut it off; it was about the size of a raspberry. The thread separated in five days, and there was no hemorrhage. I kept him under observation some time, giving him tonics. He was ultimately discharged perfectly recovered.

Hugh L—, æt. 9, a weak and irritable boy, emaciated and bloodless, suffers from cough. His mother says he has been troubled for five years at least with his bowel coming down whenever he went to the closet. He returned it himself by pressure. He had

been taken to many medical men, and also to hospitals, and she had been told that it was a weakness of the bowel, and had used ointments and lotions for it. The loss of blood he had sustained lately had been very severe. He did not suffer any pain. When I first saw him, his mother said "his body" would come down if he stooped and strained a little, and on his doing so, a round, vascular, bright-red villous body, bleeding freely, was seen outside the anus. It was not at all painful to touch. I found that it was connected with the bowel just above the internal sphincter by a pedicle of pale color, at least two inches long. I applied a silk ligature and ordered him a little aromatic confection to confine his bowels. In three days the ligature separated on action taking place. I then prescribed for him some iron and cod-liver oil. In a fortnight they brought him again, saying that another substance had made its appearance; and, sure enough, on his straining, a tumor, almost precisely similar to the former one, protruded from the anus. This also I ligatured. When I saw him at the end of a week, I administered an injection to see if there were any more polypi; but I found none, so discharged him as cured.

Duncan J—, æt. 18, came to St. Mark's in 1867. His health was generally good. For twelve months he has had something protrude from the anus on visiting the water-closet, and he has lost a quantity of blood. It retracts spontaneously on his rising up after the action. He has been under the care of many physicians and surgeons, and has always been treated for bleeding piles. He has a pain of a dragging, burning character in the rectum, but it is not severe. After

an injection, a large (the size of a walnut) vascular, velvety-looking polypus appeared at the verge of the anus. The pedicle was rather thin, and not so long as usual. I held it with a vulsellum while the house-surgeon applied a ligature; this was pulled so tight that it cut through the peduncle at once. I was apprehensive of bleeding, and so kept him lying down in the out-patients' room for a couple of hours, when, finding there was no hemorrhage, I sent him home. In a week he came and said he was quite well.

Martha H—, æt. 25, married; no children; several miscarriages; admitted into St. Mark's 1865. She had one perineal hæmorrhoid and a dorsal fibrous polypus, the size of a hazel-nut. The polypus had a shortish broad pedicle; it was situated above the internal sphincter, and I found some difficulty in applying a ligature. She left the hospital well.

Mr. James B—, æt. 37, was sent to me by a medical man who thought he was suffering from piles. After an injection a polypus came down, resembling much that found in children, but it was firmer and not so vascular; it was about the size of a raspberry. I placed a ligature on the stem and cut it off. This gentleman did not rest, as I advised him to, for a few days, and he had an abscess form a week after the separation of the ligature.

These cases of polypus forcibly illustrate the desirability of always giving an enema before making an examination, as it is only by seeing the patient just after the bowels have acted that you can make certain of your diagnosis.

The only treatment to be recommended is the removal of the growth. I do not think it safe either to cut or tear polypi off, as troublesome arterial hemorrhage may ensue. I have seen them bleed very freely indeed, and, as they are attached rather a distance from the anus, it would be by no means easy to place a ligature upon the bleeding vessel.

I have used the clamp and actual cautery twice, and it answered very well, but it is rather a formidable proceeding, the idea of hot irons frightening the patient, although really the application is painless, as also is the ligature; the latter has the advantage of being always at hand; but my clamp which I use for operating upon small hæmorrhoids combined with torsion is, I think, the simplest and at the same time a most efficient way of removing the polypus—there is no danger of hemorrhage, no pain, and scarcely any necessity for resting more than one day.

If a ligature be used I think it is very desirable that the patient should rest until it separates, and I usually order a mild astringent draught to keep the bowels confined for three days, then I administer an aperient, and on relief taking place the ligature comes away. In two cases I have seen abscesses follow where much exercise had been taken.

CHAPTER X.

ULCERATION OF THE RECTUM.

Having considered the subject of fissure, or small painful ulcer, I will now describe a much more serious and less curable malady, viz., ulceration extending above the internal sphincter, and frequently situated entirely above that muscle. This disease is not at all an uncommon one; it inflicts great misery upon the patient, and if neglected, leads to conditions quite incurable by all ordinary means. In the earlier stages of the malady careful, rational, and prolonged treatment is often successful, and the patient is restored to health; I wish I could say the same of the severe and long-standing cases. As the earlier manifestations are fairly amenable to treatment, it is of the utmost importance that the disease should be recognized early. Unfortunately, it rarely is so; the symptoms are obscure and insidious, the suffering at first but slight, and so the patient deceives, not only himself, but his medical attendants, by the little heed he gives to the complaint.

In the majority of these cases the earliest symptom is morning diarrhœa, and that of a peculiar character, in my opinion quite indicative of the disease. The patient will tell you that the instant he gets out of bed he feels a most urgent desire to go to stool; he does so, but the result is not satisfactory. What he passes is generally wind, a little loose motion, and some discharge

resembling "coffee-grounds" both in color and consistency; occasionally the discharge is like the "white of an egg" or "a jelly-fish;" more rarely there is matter. The patient in all probability has tenesmus, and does not feel relieved; there is something of a burning and uncomfortable sensation, but not actual pain; before he is dressed very likely he has again to seek the closet; this time he passes more motion, often lumpy, and occasionally smeared with blood. It also may happen that after breakfast, taking hot tea or coffee, the bowels will again act; after this he feels all right, and goes about his business for the rest of the day, only, perhaps, being occasionally reminded by a disagreeable sensation that he has something wrong with his bowel. Not by any means always, but at times, the morning diarrhœa is attended with griping pain across the lower part of the abdomen and great flatulent distension. When a medical man is consulted the case is, in all probability, and quite excusably, considered one of diarrhœa of a dysenteric character, and treated with some stomachic and opiate mixture, which affords temporary relief. After this condition has lasted for some months, more or less, as influenced by the seat of the ulceration and the rapidity of its extension, the patient begins to have more burning pain after an evacuation, there is also greater straining and an increase in the quantity of discharge from the bowel; there is now not so much jelly-like matter, but more pus—more of the coffee-grounds discharge, and blood. The pain suffered is not very acute, but very wearying; described as like a dull toothache, and it is induced now by much standing about or walking. At this stage of the complaint the diarrhœa comes on in the evening as well as the morning, and the patient's health begins to give way, only

triflingly so, perhaps, but he is dyspeptic, loses his appetite, and has pain in the rectum during the night, which disturbs his rest; he also has wandering and apparently anomalous pains in the back, hips, down the leg, and sometimes in the penis. There is yet another symptom present in the later stages, marking the existence of some stricture of the bowel, viz., alternating attack of diarrhœa and constipation, and during the attacks of diarrhœa the patient passes a very large quantity of fæces. These seizures are attended with severe colicky pains in the abdomen, faintness, and not unfrequently sickness.

As the ulceration extends, attempts at healing take place; these result in infiltration and thickening of the submucous and muscular tissues, and consequent contraction of the bowel, so that more or less stricture supervenes. Coincident with all this there results a gradual loss of the contractile power of the rectum, and almost complete immobility, so that the lower part of the gut is converted into a passive tube, through which the fæces, if fluid, trickle; but if solid, they stick fast until pushed through by fresh formations above them. Invariably also there is loss of power in the sphincters. When diarrhœa is present the patient has little or no control over his motions. Usually by this time abscesses have formed, or are in process of formation, and these breaking soon become fistulæ. I have seen persons with as many as eight external orifices, some situated three inches or more from the anus.

On examining these cases of ulceration of the rectum various conditions may be noticed according to the stage to which the disease may have advanced. In the earlier period you may often feel an ulcer situated dorsally

about one and a half inches from the anus, oval in form, perhaps an inch long by half an inch wide, surrounded by a raised and sometimes hard edge; there is acute pain caused on touching it, and it may be readily made to bleed. With a speculum you can distinctly see the ulcer, the edges well marked, the base grayish or very red and inflamed-looking, the surrounding mucous membrane being probably healthy; in the neighborhood of the ulcer may often be felt some lumps, which are enlarged rectal glands. This is the stage in which the disease is quite curable, as I shall show when speaking of treatment. Later in the progress of the malady you will observe deep ulcers, with great thickening and nodulation of the mucous membrane, often also roughening to a considerable extent, as though the mucous membrane had been stripped off. Now also you generally have, outside the anus, swollen and tender flaps of skin, shiny, and covered with an ichorous discharge; these flaps are commonly club-shaped, and are met with also in malignant disease. So definite is this external appearance that one glance is sufficient to enable one to predicate the existence of either cancer or severe ulceration; these external enlargements are the result of the ulceration going on in the bowel, and the irritation caused by almost constant discharge. The ulceration may be confined to a part of the circumference of the bowel, or it may extend all round, and for some distance, but not usually for more than four inches up the rectum. It also probably will have travelled downwards close to the anus, and then the pain is sure to be very severe, because the part is more sensitive and more exposed to external influences and accidents. When you have arrived at this condition stricture and fistulæ will be present, as I have already mentioned; and occasionally

perforation into the bladder, into the vagina, or the peritoneal cavity, may occur. The state of the patient is now most lamentable; his aspect resembles that of a sufferer from malignant disease, and no remedy short of lumbar colotomy offers much chance of even prolonging life. You may relieve these patients, but nothing more than very temporary improvement takes place. I have seen ulceration utterly destroy both the anal sphincters, so that the anus was but a deep ragged hole. Here is a case which was under my care at St. Mark's Hospital.

Matilda G—, admitted under my care January, 1871. She is a married woman, 28 years of age. Five years ago she was a patient of mine with stricture and ulceration. She went out tolerably well, and continued so up to about eighteen months back: since then she has suffered much; she has constant pain and discharge from the bowels; she either has constipation or diarrhœa. There is entire incontinence of fæces. The straining and bearing-down is very distressing; her aspect is worn and sallow; she is not very emaciated; there is no evidence of syphilis nor consumption. On examination a large, ragged deep hole is seen instead of an anus; it is surrounded by swollen flaps of skin, two of which are perforated by fistulæ; the hole measures about two inches each way, and there is not a vestige of sphincter muscle left. On introducing the finger into the bowel it is found quite blocked up by contraction and thickening; only a very small aperture can be felt, but into this the end of the finger cannot be passed. Chloroform being given, she strained down so violently that the strictured portion of the bowel was forced outside, so that the ulceration and stricture

could be plainly seen. The aperture was not larger than a No. 10 male catheter.*

Years may have elapsed before the dreadful condition I have been describing has been brought about, but it is one we only too frequently see at St. Mark's.

Patients suffering from ulceration and stricture are very liable to attacks of a low form of peritonitis, attended with considerable abdominal pain, often intense for a short period. There are generally one or more spots that are tender on pressure; there is tympanitis, often vomiting, especially on first assuming the erect position in the morning, and generally the pain is brought on by standing or moving about; these attacks are sure to end in diarrhœa. The treatment should be perfect rest in bed, spoon diet, and opium may be given freely; fomentations relieve the pain, but I have not seen any benefit result from counter-irritation. I have thought that calomel and opium given for a few days is advantageous in some cases. These attacks seem to be quite independent of the state of the ulceration and the condition of the bowel as to obstruction.

When making a post-mortem in these cases I have observed effusion into the peritoneal cavity, and pretty considerable old and recent adhesions between the intestines; the peritoneum is also thickened. In bad ulceration you see what great destruction of tissue has taken place. The whole of the rectum and sigmoid flexure I have found involved in ulceration, attempts at

* This patient left the hospital very much benefited by the treatment, but she returned to me in the early part of this year almost as bad as ever; after having her in the hospital for eight weeks she again left relieved, but more failing in her general health; she would not submit to colotomy.

repair in various parts giving rise to great thickening and contraction of the calibre of the bowel. The connective tissue here and there is so removed as to leave large bridges of hypertrophied and roughened mucous membrane; and there is ulceration, so deep in places that perforation must have occurred but for the adhesions kindly made by nature to the adjacent parts. In other situations the muscular coat is laid quite bare, and I have seen more than one case in which necrosis of the sacrum had taken place.

It is often difficult to assign any cause to these ulcerations; in fact, I am of opinion that a great number of cases occur in persons who have been uniformly healthy up to the time that the ulceration commenced; not unfrequently the patients may have been subject to constipation, but I have often seen more confirmed costiveness in individuals who never suffer from any ulceration at all.

I have no doubt that very many are of syphilitic origin. They may be the result of either secondary or tertiary syphilis; and other syphilitic lesions will be observed, but sometimes the ulceration of the bowel, with a syphilitic history, is the only symptom present. When the ulceration exhibits itself as a secondary symptom you usually find condylomata around the anus, and *only* the *mucous membrane* of the rectum is affected; but when it occurs as a tertiary manifestation, the disease, I have reason to believe, primarily attacks the submucous *connective tissue;* the ulceration is consequently more severe in character and very intractable.

The secondary ulceration of mucous membrane yields readily to antisyphilitic remedies, but this is not the case with the tertiary affection; I have frequently seen the best devised means fail to effect a cure, and I will

relate some illustrative cases when I come to speak of treatment.

Strumous ulceration of the rectum is by no means an uncommon variety. I have seen many well-marked examples where glandular enlargements and the cicatrices of old abscesses in the neck were evident. I cannot say that I have at all frequently met with the conjunction of tubercular phthisis and *severe* ulceration of the rectum. I have seen cases of bad ulceration terminate in phthisis, but it has appeared to me that the lung affection was only coincident with the general breaking up of the constitution, and in most of the fatal cases the patient dies of exhaustion without any lung symptoms having been manifested.

Dysentery is usually said to be the frequent forerunner of rectal ulceration. This is not my experience; I have myself been in hot climates and seen severe dysentery, and I have also often treated people who have returned from the tropics suffering from that malady, but I cannot say that I have met with many instances of resulting *rectal* ulceration, and in those I have seen the ulceration has been slight and superficial and cured without much difficulty.

Now, as to treatment: in the early stages of this disease, when there is only one ulcer, without much alteration in the surrounding tissues, a cure is pretty certain to be effected, if only the patient will scrupulously adhere to certain rules of treatment. To illustrate this generally I will relate what I should call a model case, and the plan adopted to cure it.

Wm. G—, æt. 35, a pilot, was sent to me from Gravesend by Mr. James Armstrong. The patient said he was suffering from bleeding piles and diarrhœa.

He was a fair, tall, not unhealthy-looking man, a good deal exposed in his business to wet and cold, and of course standing about for many hours together. For more than twelve months he had suffered from diarrhœa. Always in the morning, directly he got up, he had to go to stool three or four times before he could get dressed; he strained but did not get rid of much motion at one time; the fæces were scarcely ever formed, but passed in small broken pieces; when the bowels acted he discharged a stuff like the white of an egg; sometimes there was also blood and matter. After action he had a burning pain, not very severe, but worrying; he continued pretty comfortable all day, but generally at night he was again purged, and had recurring griping pain in the bottom of the stomach; his appetite was bad; standing about gave him pain under the buttocks, and in the back. He had been to two hospitals in London and under the care of several medical men at Gravesend, but had only derived temporary relief from the treatment that had been adopted. Without examining this patient I was sure that he had ulceration of the bowel, and perhaps stricture. On introducing my finger I found a largish ulcer, dorsally situated, above the internal sphincter; it was painful when touched, the edges were raised and soft; on withdrawing the finger blood and matter were seen upon it. An examination with a speculum showed the ulcer to be nearly circular and quite an inch in diameter; it was not very deep, and the floor was dull red and glazed. There was no history of syphilis, but there was of tubercular disease; his father died of what was supposed to be decline, and when the patient himself was twenty years of age he suffered from cough and spat blood, but went some long sea-voyages and recovered. He

had been losing flesh lately, and was muscularly weak; he was obliged to be very careful as to his diet, but often on board ship was compelled to eat salt beef or pork, which always made him worse.

In my opinion there is only one method of treating these cases with anything like certainty of success, and I determined, if possible, to carry it out on this patient. I endeavored to impress upon his mind the advisability of submitting himself entirely to my guidance by showing him the urgency of the case, and the seriousness of the disease if neglected. I further explained to him the *rationale* of the plan to be pursued, and thus I succeeded in enlisting his hearty co-operation.

I ordered him a full dose of castor oil to clear out his bowels, and then I confined him to bed—to lie on a hard mattress—and his diet to consist *solely* of milk and curds and whey; nothing else whatever, unless he wished for water, and that he might have. Every night he was to inject into the bowel half a drachm of Liq. Opii Sedativus in an ounce of cold starch by means of an india-rubber bottle. He took no medicine whatever. On the diet I have mentioned I kept him for three weeks; he consumed about two and a half quarts of cold milk in the twenty-four hours. The advantage of this treatment was seen in a week (after two days he had no diarrhœa), for when I examined him I found the ulcer had contracted to about half its original size. At the end of a fortnight it was still smaller, and he was feeling so much better that he begged me to allow him to get up, but I only consented to his lying outside the bed. At the termination of the fourth week of treatment the ulcer was barely visible. I now permitted him to be dressed and lie on a sofa, and I added to his milk diet, beef tea, arrowroot,

soup without meat, and sago. His bowels acted about once in two or three days; the motions were very small, and neither hard nor relaxed. By the end of the fifth week I permitted him gradually to return to his usual diet, beginning by taking very little meat and vegetables and no stimulants. He was weighed the day he commenced the treatment and again the first time he was able to go out, and it was found that he had lost three pounds. By the end of the sixth week he got back to work again; the ulcer was perfectly healed, and his bowels acted naturally. He felt himself at first rather weak, but in a few days he became much stronger than before he took to his bed. I now ordered him some cod-liver oil three times a day, and this was the only medicine prescribed during his illness. I saw the patient many times after he was well, in order to watch the result of the case, and I have heard of him lately. He has had no return of ulceration.

This subject is so interesting to me that I cannot refrain from detailing another case or two out of the many I have treated in this way.

Mr. A. R— came to me with this history. Twelve months ago he was operated upon in Liverpool by an eminent man for fissure. After the operation he was much better, but did not get quite well; the wound never seemed to heal, and in about three months he went away to the seaside, hoping that change of air would do him good, but instead of that he got worse.

The pain he formerly suffered gradually returned, and his surgeon told him that the old wound had healed, but that ulceration existed higher up the bowel. For this he had procured much advice, but he

did not obtain more than temporary relief. The injection of opiates into the bowel mitigated the pain, but he was never quite easy, and suffered much after action, which was attended with tenesmus. Sometimes the pain would continue all day. His rest at night is often broken, and he is compelled to take morphia to procure sleep; he does this, however, as rarely as he can, as he finds himself always worse afterwards, and it confines his bowels. He has flying pains in the back, hips, down the legs, and a sensation of weight in the perinæum. He passes water very frequently, and sometimes has a difficulty in relieving himself. He cannot walk far, or ride, or sit long, without increased suffering. This gentleman was forty-seven years of age. He did not look unhealthy, but was rather worn. There was no history of syphilis or phthisis. On examination I saw the scar where the incision had been made for the cure of the fissure. Above this the bowel was ulcerated, but not deeply, to the extent of more than half its circumference, and about an inch from the anus was a decided but not severe constriction. I was able to pass my finger through it with a little gentle pressure; the bowel above—as it usually is—was quite healthy. I wanted very much to divide the sphincter muscles in this case, and then put the patient on the milk diet, with perfect rest; but to the operative part of the proceeding he strongly objected, nor could I persuade him to consent. I therefore with much misgiving undertook the case. I cleared out the bowels thoroughly, and then commenced the milk and curds and whey diet. I passed a bougie three times in the week, and painted the ulcer with the Linimentum Æruginis, which I often find very useful. For the first few nights he took fifteen grains of hydrate of

chloral, but he was soon able to dispense with that. At the end of a fortnight's treatment the stricture was fully dilated, and the ulceration had to a great extent healed; his bowels acted without pain or straining, and he felt better than he had done for months. I allowed him now to lie upon a sofa, but not to walk about at all, nor to vary his diet. The bougie I passed twice in the week, and he used calomel and opium ointment.

In six weeks from the commencement of the treatment he was able to go away; the ulceration had entirely healed, and he felt himself perfectly well, although not strong; while on the milk diet he gained four pounds in weight. I told him to continue to pass a full-sized bougie once a fortnight, to be very careful in his diet, and to avoid excessive fatigue of all kinds. There was no occasion to say anything about keeping his bowels open, as he had now no difficulty in that respect. Although this patient did so well, I do not consider him *cured*. These cases of stricture with ulceration are very apt to relapse, and I have no doubt, if he should neglect himself, he will again fall ill.

Emma W—, æt. 27, a married woman with children, was sent to me at St. Mark's Hospital by Dr. Simpson, of the Old Kent Road, November 28, 1870. For some years she had been suffering with her bowel, great pain and difficulty in getting anything to pass her; she had much discharge of blood and matter. She is a very fair woman, with a strumous cicatrix in the neck; there is no history of syphilis. On examination, outside the anus several hard, swollen, external piles were seen, and also the orifice of a fistula. A very tight stricture existed about an inch and a half up the

bowel; below this there was ulceration all round the rectum; the fistulous sinus opened nearer the anus than the stricture. The contraction of the gut was linear and very considerable, so I put her under the influence of chloroform, gradually got my finger through and nicked the stricture very slightly indeed in five or six places around the gut. I then dilated it a little more with my finger. After this she was put on a milk and egg diet; she was so very weak that I was obliged to allow her a little brandy, as she had been used to stimulants lately, having no appetite. Every night she had an injection of Liq. Opii Sedativus and starch, and every other day a bougie was gently introduced. For a week after, I dilated the stricture; she passed nearly every day a large quantity of fæces, so loaded was her colon; this interfered materially with the progress of the case, but at last she seemed to be cleared out, and at the end of three weeks the ulceration was very much better and the constriction could no longer be detected. At the end of five weeks, the ulceration being nearly healed, I laid open the fistula; after this she went on very well, and was so much better that she became sick of the milk diet, and I yielded to her entreaty and gave her more substantial food. She left the hospital, as she was wanted so much at home, not quite well, but nearly so. She has lately been to see me as an out-patient, and I find the ulceration remains healed, but the stricture has, consequent upon her not using the bougie, returned to a slight extent.

I will relate only one more case.

Mr. E—, a gentleman æt. 27, was under my care for

syphilitic fissure some five years ago. This was of a very obstinate character and would not yield to general treatment. Before he came to me he had been well treated by a very competent surgeon, who had exhausted all the remedies likely to have benefited him, so I at once proposed division of the muscle, which I performed, and he quickly got well. After being quite sound for about four years he violently exerted himself by velocipede riding, and soon after this he commenced to have pain on defecation; he then consulted me again. On examination I found that he had an ulcer in the bowel about an inch from the anus on the opposite side to the old fissure. He had now no symptom of syphilis, but, recollecting his history, I put him upon an anti-syphilitic treatment as well as applied local remedies; however, he did not get better. I then advised him to lay up and commence the milk diet, and in a fortnight the sore was quite healed. He then, contrary to my advice, resumed his ordinary food and went about his business, and in a month he came again to me with the ulcer as bad as ever; thoroughly warned now, he again betook himself to rest and the milk diet, and the sore healed, but this time more slowly; it was very sluggish, and required repeated stimulation with sulphate of copper to get it to granulate; however, in six weeks he was once more well, and profiting by his former mishap, he takes care of himself, and if he continues to do so will, in all probability, keep well.

I could relate more hospital cases in which rest and milk diet have been eminently successful, but these patients rarely will stay long enough under treatment to secure a permanent cure; as soon as they get better they must go out to their work or care of their families,

so that I have several times been much disappointed at a case which promised very well relapsing after the patient had left the hospital.

Ulceration not infrequently induces such an irritable condition of the rectum that no injection, suppository, or ointment can be retained; directly anything is introduced into the bowel expulsive efforts, over which the patient has no control, take place, and are continued until, and even after, the gut is emptied. This state is very distressing to the patient and baffling to the surgeon; but I have found that bismuth and powdered charcoal taken internally for a few days will overcome this excessive irritability, and the rectum then becomes more tolerant of local applications; of these, perhaps, at first a suppository of the subacetate of lead, belladonna, and opium will be found most serviceable; as an ointment I often employ subnitrate of bismuth with powdered opium and elder-flower ointment, and it seems to be most soothing and to relieve pain in a remarkable manner.

Slight and recent ulceration of the bowel may sometimes be successfully treated by perfect rest and the use of astringent and opiate injections or suppositories. I think the latter often very serviceable; I have them made of cacao butter and lard or Unguentum Cetacei, and medicated with opium, morphia, or belladonna, and the following astringents—tannin, sulphate of zinc, oxide of zinc, tartrate of iron, persulphate of iron, calomel, lead, &c.; they can be very easily inserted by the patient by means of a little bone instrument, like a boy's popgun. I always employ these little tubes for the introduction of ointments also. Messrs. Maw & Sons, of Aldersgate Street, keep them. As a rule, I

have not found astringent injections of so much avail, but occasionally they answer wonderfully.

My friend, Mr. Wm. Clapton, recently brought a gentleman to me suffering from a very vascular dorsal ulcer about an inch and a half up the rectum. We both of us saw and felt the sore most distinctly; he complained of bleeding and dull burning pain; it was evidently of recent origin. He used, at our suggestion, an injection of sulphate of zinc and Tinct. Opii, and rested as much as posssible; the ulcer soundly healed in a remarkably short time. I have very often failed to obtain a cure when using precisely the same lotion, and I suspect this case got well because it was treated very early. I now never let a patient go on for long without adopting perfect rest and the milk diet; that is, I always try and persuade my patient to take to his room at once; a great deal of time and suffering is saved in the end.

I have stated that syphilitic cases, when the ulceration is a tertiary symptom, are dreadfully intractable. I have not found much benefit to accrue from large doses of iodide of potassium or from perchloride of mercury. I think iodide of potassium and sarsaparilla, long persevered in, do good in the end. I always order the fluid extract prepared after Squire's formula. I am bound to confess that these cases do not, as a rule, end well. The most carefully carried out and the best-devised plan of treatment will fail more often than succeed in consequence of the *recurrence* of abscesses and ulceration. I will relate a few cases illustrating these particulars.

Mary A—, æt. 25, married; no living children; admitted into St. Mark's Hospital, April 17th, 1865.

Two years ago she was affected with syphilitic ulceration of the bowel and general eruption. She was then in the hospital under the care of my colleague, Mr. Gowlland, and she went out much relieved, if not quite well; but getting worse again she obtained admittance into St. Bartholomew's, where she says, some operation was performed upon the bowel. She left after nine weeks, better, but not by any means recovered; since then she has been gradually failing in health and suffers much in the rectum. On examining her I found extensive syphilitic ulceration and stricture of the bowel; so high up did it reach that the finger could not detect healthy tissue, and there were also two complete fistulæ, both opening in one internal aperture near the anus. They neither of them ran up above the stricture. She had rupial rash, nocturnal periosteal pains, and was in a very cachectic condition. She was under my care for some time and had good diet, large doses of iodide of potassium with bark, wine, &c. The stricture was dilated, which benefited her temporarily, but she left not much better than she came in. I heard from her husband that she died in about three months after she went home.

Mrs. H—, a very respectable woman, æt. 35, a widow, who had formerly been in good circumstances, became my patient at St. Mark's. She had very pronounced tertiary syphilis, nodes, ulceration of hard palate, with necrosis of bone and ulceration and stricture of the rectum; her syphilitic symptoms had existed for many years. She had very frequent diarrhœa and discharge of coffee-grounds matter, with very little control over her motions. This patient was under my care for years, and was better and worse, never long

remaining away from the hospital. I finally lost sight of her, as she went into the country. I tried everything that I could possibly think of, but nothing was of much service, and I have no doubt that the disease has killed her.

Mr. N— was sent to me from New York by an American physician who used to attend the practice at St. Mark's Hospital. This gentleman's name I regret to own I have completely forgotten. Mr. N— had been ill for years; he confessed to having led a very fast life. He contracted syphilis, and was treated by Dr. Bumstead; he took mercury, secondary symptoms followed, and now he has tertiary syphilis. There exist nodes on the tibiæ and clavicles, pains in the joints and head, much worse at night; he has also patches of rupia. He is a very tall, thin, delicate-looking man, and smokes almost perpetually. The object with which he came to me was to see if I could do anything for his rectum. He generally has to go to stool a good many times in the morning before he obtains relief, and he has great pain; there is much discharge, so much that he is always compelled to wear a napkin, and he has very little power to prevent his bowels acting, particularly when taking exercise. On examination, some swollen external tabs of skin are to be seen, and on his straining down, three internal piles protrude. When the finger was introduced into the bowel, ulceration was found nearly all round; above the internal sphincter were several hard nodules, and higher up there was a stricture so tight that it could not be penetrated. This gentleman was under my care for about six months, and he returned to America very greatly improved, but not well. He was not a very

easily controlled patient; he could not be persuaded to try the milk diet for long, and when he got a little better, he took too much exercise, smoked too much, and drank freely, so that he really did not give the treatment a fair chance. His stricture I carefully and fully dilated; he took large doses (60 grains) of iodide of potassium three times in the day in sarsaparilla, and his general syphilitic symptoms were completely removed. When he left my care there was still some ulceration, but he suffered very little pain; he had become "au fait" at passing a bougie for himself, and I think, if he takes care, he may go on very well for a time, and that is all I can say.

It is in cases of fistula and stricture, where the fistula opens above the constriction, that Mr. Luke's plan of cutting through the dense tissues by means of strong twine and a screw-tourniquet is valuable. I have before described this mode of operating. I need only here mention that sound skin must not be included in the ligature, or great pain will be caused. Often the fistula is so deep and the structures to be cut through are so cartilaginous that it would be hazardous to use the knife. Unfortunately, as a rule, the internal orifices of these fistulæ are not situated above the seat of stricture, but below it. A good deal of temporary benefit may be derived from laying these sinuses open so as thoroughly to divide the stricture, but I cannot say I have ever seen any permanent good done. I have often been remarkably satisfied with the result a month after the operation, and the patient has left the hospital passing full-sized motions and in great comfort; but in six months I have been dreadfully disappointed to find the stricture worse than ever; the

tendeney to eontraction is so great that it overcomes all our efforts to keep the canal dilated, and very soon fresh abscesses make their appearance, and other fistulæ arise. Many eases of this character have been reported as "completely recovered;" an extended experience has convinced me that the improvement is but ephemeral.

I need scarcely say that after the operation I have mentioned, where the stricture and sphincter are cut right through, no matter how the division is effected, the patient will have incontinence of fæces. As a rule, this does not matter, as probably there was more or less of that before you interfered; but if there is any power in the sphincter, you had better tell your patient that he may lose control over his bowels, or he will be sure to blame you for producing such a result. In the most advanced stages of ulceration and stricture, where there are several fistulæ and the whole rectum disorganized, as it frequently is, nothing short of lumbar colotomy offers to the patient any chance of life. My experience is that these are really the cases in which colotomy is especially to be recommended. I have now three patients alive who were operated upon years ago; I saw a woman lately upon whom I performed colotomy in the year 1867, and she continues perfectly well. Three of my cases are published in the "St. Thomas's Hospital Reports" for 1870. It is unfortunate that it is not often one can persuade these patients to submit to colotomy until they are almost "in articulo mortis;" they have a natural repugnance to the idea of an opening in their loins for the rest of their lives, and so they postpone the operation, often until it is too late. My own opinion is that the operation may be considered not merely palliative, but cura-

tive; in time, I am sure, from the cases I have watched, the rectum will in a great measure return to a healthy condition. When no fæces pass through it, the ulceration will heal and the stricture may be dilated; fistulæ will also close, spontaneously in some cases. If we could assure these patients that, should the rectum again become pervious, and the ulceration heal, we could close the opening in the loin, many no doubt would willingly undergo the operation, but I feel that this is just what I cannot guarantee. I last year attempted to close the lumbar aperture in a hospital patient, and the operation was not a success. In this case the patient's rectum had become fairly sound; there was no ulceration and no stricture, and some time before I had slit up a fistulous sinus, and that had quite healed. She had often passed some motion per anum, but usually it all came through the loin. Being quite satisfied that the bowel below the loin opening was perfectly patent, this is how I proceeded to operate: I carefully detached the colon from its adhesions to the skin and the surrounding tissues; this I found to be a much easier task than I had anticipated; when the gut was thus freed, it at once dropped down to a considerable depth; with some little difficulty I fished it up again, pared the edge of the hole obliquely, and I believe I succeeded in getting apposition of raw surface all round. I used a continuous suture of carbolized catgut. I did not close up the external aperture then. (In this, now I think I was in error.) I kept the patient's bowels confined for ten days, and then gently solicited them to act by a small dose (a drachm) of castor oil given three times in the day. After four doses I was delighted to find that there had been free action per anum and no apparent escape at the loin.

Three days after this I freshened up the edges of the skin wound and brought it together with deep sutures. This did not quite heal, an aperture, into which a No. 10 catheter could be passed, remaining near the spine. We had now some difficulty with the bowels; I administered enemata very cautiously, but without success, and, not wishing to get very full-sized or hard motions, I gave increased doses of castor oil; then the bowels acted freely, and, to my great disappointment, liquid motion escaped from the loin. This has continued; she passes fæces per anum, but also from the lumbar aperture or sinus. This, I suspect, is what has occurred: the wound in the bowel has not quite healed, and motion has passed into a cavity between the colon and the lumbar muscles.

I know there is a cavity because I can pass a probe into the loin sinus, and sweep it round for three or four inches. What I intend to do is to lay open the old wound in the loin, *try* to pick up the colon, and find the opening; pare it again, and bring the edges together. The operation in some respects has encouraged me, in others disappointed me. The patient is rather tired, for awhile, of operative surgery, and she has gone into the country to recruit her health. I trust when she returns she will again allow me to try and close the opening.*

Talking some time since of this patient to my friend Mr. Bryant, he told me that he had a very similar experience to mine, a case in which he had attempted to

* I have not been able to persuade this patient to allow me to try and close the sinus in the loin. She passes most of her fæces per anum, but a little still escapes at the loin, particularly after an aperient. She is so fairly comfortable that she prefers remaining in her present condition to running any further risk.

close an aperture in the right loin having at present not succeeded. I am not very sanguine about the matter myself, as I have had cases under my care where a pelvic abscess has opened into the cæcum, or into the colon close to it, and also at the right groin; and I have most freely laid open the abdominal cavity, but have not succeeded in getting the aperture into the intestine to close. A girl suffering in this way was recently under me in St. Mark's, and I could not do her any good. My colleague, Mr. Alfred Cooper, some years back had a patient with a fecal fistula in the left groin connected with syphilitic stricture and ulceration of the rectum, and he was fortunate enough to obtain a successful result by very freely laying open the cavity which had formed between the intestine and the groin, granulation closing the opening into the colon. It was the remembrance of this case which encouraged me, but I fear one cannot always expect a like favorable result.

CHAPTER XI.

STRICTURE OF THE RECTUM.

Stricture of the rectum without ulceration is a somewhat uncommon affection. It is not difficult to understand how stricture takes place after, or in conjunction with, ulceration. The thickening of the tissues and the necessary contractions which result from the attempts at repair must narrow the canal, but it is not so easy to see how or why a stricture should occur *per se*. The rectum is a tolerably large tube (not like the urethra, where a very little deposit is sufficient to nearly block up the passage), and a considerable thickening might take place without causing any great obstruction.

We may, perhaps, suppose that inflammation of the submucous tissue produces a deposition, and, besides this, or resulting from this, there is spasm. I am sure this is often the case; I have seen strictures of the rectum so tight that I could not get the end of my little finger into them, but when the patients were well under the influence of chloroform I have been able to pass one or two fingers through easily.

How inflammation and thickening is set up in the connective tissue of the bowel is difficult to say. Chronic constipation may be a cause. Straining to evacuate the contents of the bowel forces down the upper part of the rectum into the lower, causing an

intussusception; it thus gets within the grasp of the sphincter muscles, and this may be the starting-point of the irritation.

I have in some few cases thought that the long-continued pressure of the child's head in labor has been the exciting cause, bruising of the bowel having perhaps taken place.

Possibly, also, inflammation may be induced by the passage of very dry and hardened fæces, though doubtless this condition may obtain for years—as it often does in old people—without producing stricture.

I have seen one case in which the frequent, and perhaps rather rough, use of an enema pipe produced a stricture. This occurred in an elderly lady who had for years given herself an injection daily. She did not at first suffer from constipation, but she had been recommended an enema, and at last she could not get an action without it. I thought in this instance it was not improbable that the passage of the bone tube had been the exciting cause of inflammatory thickening of the bowel.

It may perhaps be said that I have *assumed* inflammation to be the cause of the exudation into the wall of the bowel. I must confess that I have, for I have rarely been able to detect decided symptoms of inflammation of the rectum preceding stricture. I have constantly asked patients whether they have at any time suffered from pain, burning, diarrhœa, dysentery, or discharge of matter from the bowel, and the reply has most usually been in the negative. On the other hand, I have seen cases of long-continued proctitis, especially in aged people, not followed by stricture. The coarse symptoms of stricture are, straining and difficulty in discharging the motions. You see mentioned in some

works that the stools are thin, long, and pipe-like. According to my experience this is not usually the case in true stricture; spasm of the sphincter, enlarged prostate gland, and tumors of the pelvis, much more frequently give rise to flattened and thin motions. The most characteristic feature in my opinion is the passage of numerous very small broken pieces; the fæces having no actual form, often looseness alternating with this lumpy condition. The discharge in simple stricture is like the white of an unboiled egg or a jelly-fish, passed when the bowels first act. There is no coffee-grounds-looking discharge so constantly seen in ulceration, nor is there the morning diarrhœa which we get in that complaint. There is very rarely any pain experienced in the bowel itself; the symptoms are generally referred more or less to distant parts, notably the penis, perinæum, bottom of the back, the thighs, beneath the buttocks, and occasionally the stomach. Fortunately strictures of the lower bowel are generally within reach and sight, but occasionally they are found high up in the sigmoid flexure, or still more distant from the anus. In these cases it becomes a matter of great importance to ascertain the situation of the obstruction, but this is a question I shall not enter upon here.

As to stricture of the rectum resulting entirely from muscular spasm I have never seen a case in which I believed spasm *only* to exist. I do not deny that such a condition may be found, but to me it appears to be very improbable, and I feel confident that in many of the supposed spasmodic strictures there is really no constriction at all. The operator has been misled by the bougie catching in a fold of the gut or against the promontory of the sacrum. If you are in doubt about the existence of a stricture you should use a long and

very elastic enema-tube and inject fluid as you pass it, so as to distend the gut and remove any intussusception of the upper part of the rectum. This condition, I think, has often been mistaken for stricture, as, unless the bougie goes *directly* into the *aperture* of the descended portion of gut, it gets into the sulcus at the side, which is a cul-de-sac, and the instrument cannot be made to pass. I have satisfied myself on several occasions that this has been a source of error.

There are, no doubt, many cases of stricture in which there is very little deposit and much spasm; and there are, on the other hand, cases where much obstruction exists, but very little spasm. A patient under my care at St. Mark's had a stricture so tight that I could not make the point of my little finger enter it; on putting her fully under the influence of chloroform I could get two fingers through without any difficulty.

I will now relate a case illustrating points of importance in this disease.

Mr. R—, æt. 35, a thin dark, sallow-complexioned man, was born in India, educated in England, and returned to India when about seventeen years of age; has remained out until a few years ago. He has had dysentery several times, but not very severely, and has suffered frequently from the diarrhœa of the country. He has been complaining for years of a pain in the penis, acute at times, aggravated on passing water, which occasionally comes from him "guttatim;" several times has had temporary retention. He attributes his disorder to a badly treated gonorrhœa which he contracted abroad; this was followed by a fissure of the rectum, of which he was cured by a native doctor; the treatment

being the application of some powerful escharotic, which produced a slough; when this separated the sore healed and he had no further pain. He came over to this country for advice, his symptoms then being constipation, bleeding from the bowel, pain on defecation; walking any distance always excited great pain in the penis and perinæum. Intercourse was not painful, but dull aching in the anus always succeeded it. He had been for three years under the care of physicians and surgeons in London. He had been frequently sounded for stone; one eminent surgeon had operated upon him for piles, and another equally eminent, for fissure, which returned after the operation for the hæmorrhoids. His life, he said, was a perfect misery to him; and everything that was done for him seemed only to make him worse. I need scarcely say, coming to me after the gentleman who had treated him, I was the more careful in my examination. He had neither stricture nor stone; his prostate gland was tender but not enlarged; he did not suffer from nocturnal emissions; his water was healthy, save for a few floating thready particles in it; he had no bad habits—did not smoke or drink. He suffered from confined bowels generally, but had occasional attacks of diarrhœa. The motions were small and usually broken into pieces. He always strained much at the water-closet, and never seemed to have had satisfactory relief. He noticed at times a discharge of matter upon the fæces. On examining the rectum with the finger I could detect nothing but some small excrescences near the anus; these were, no doubt, the remnants of his piles. After giving him an injection I placed him upon his stomach with his pelvis well raised, and introduced a long glass speculum. I then clearly saw, about five inches from the anus, an annu-

lar constriction; the stricture was different in color from the other part of the gut, being much paler. Withdrawing the speculum I passed my finger, and on getting the patient to strain down violently I felt the stricture and could just get the point of the finger into it. I then tried to pass a bougie about the size I thought might traverse the stricture, but I could not get it through, as the constriction seemed to be pushed upwards before the instrument. I left him alone for a few days, and then, using a smaller bougie, I succeeded in passing it; when through the stricture there was so much spasm that the instrument was as tightly held as a catheter often is in spasmodic stricture of the urethra; I only allowed the bougie to remain in for one minute. In a little while I was enabled to pass a larger bougie, but the spasm was very obstinate and easily excited, so that if I could not get the instrument through quickly it was no use in persevering; in fact, I found him to be worse if I did. The treatment occupied quite three months; at the end of that time the stricture was fully dilated; he had lost all the pain in his penis; he passed water freely; his bowels acted regularly and without straining; he gained flesh and strength, and was ready to acknowledge that he had not been so well for years. Of course he learned to pass the bougie for himself, and he has returned to India. With due care I do not see why he should have any relapse.

This was one of the nearest approaches to true spasmodic stricture of the rectum I ever saw, but even here there was a small amount of thickening. The history of this patient showed that he had suffered from both diarrhœa and dysentery which had, in all probability, induced some organic changes. This case also exhibits

the peculiar symptoms sometimes found attending strieture of the bowel; they are not diffieult of explanation when we consider the nerve anatomy of the parts. The pudie, anterior, and posterior saeral nerves, from the lumbar plexus, supply the lower part of the rectum, the base of the bladder, the neighborhood of the prostate gland, and the penis; so pain in the penis, diffieulty in micturating, and even retention of urine, may exist without there being any disease of those organs. The rapid manner in which this patient lost all his pains, when the strieture of the reetum was dilated, shows, I think, eonelusively, upon what they really depended. I may mention that the only supplementary treatment to the use of the bougie was an oeeasional mild aperient and the exhibition of tonies.

In treating this disease gentle dilatation is in my opinion the best method to adopt. I say *gentle* very advisedly, as I am sure the more thoroughly this idea is kept in view the better it is for the patient. I do not like any forcible dilatation except in very speeial eases. I have seen severe hemorrhage follow the use of Todd's dilator. This is an instrument requiring great eare in its use, and it should be always covered with an india-rubber sheath to prevent its eatehing the mueous membrane as it is withdrawn; unless this precaution be taken, very great difficulty will be experienced in removing it, and much damage may be done to the reetum. I am of opinion that this dilator ought only to be used for strictures quite near the anus; when they are situated high up the rectum it is most dangerous.

There was a young woman some years ago in St. Mark's Hospital suffering from strieture, without ulceration, about three inches from the anus. This strie-

ture had been caused by the application of strong nitric acid for the cure of procidentia. Todd's dilator was used by no means roughly or carelessly; there was no bleeding when the instrument was withdrawn; a short time after the operation she felt very faint, and a great discharge of blood took place on her going to stool. The following symptoms then presented themselves: There was apparently no bleeding at all for a little while, then she had a sensation of something trickling in the bowel; this was followed by pain and rumbling in the intestines; soon after this she had an irresistible desire to go to stool, and then she passed a quantity of clots and fluid blood, both venous and arterial; she then fainted and the hemorrhage ceased, but the attack recurred on her recovering her circulation. I have not the slightest doubt that this patient would have died had she been left unattended. When the house-surgeon sent for me, ice water had been injected and brandy freely administered without any favorable result. She was then completely collapsed and pulseless. I immediately plugged the rectum with a large piece of sponge, thrusting it with some force through the stricture, so that part was beyond and part in the stricture; below this I packed in wool; the hemorrhage was arrested at once. The sponge was retained for three days, I then removed it, as it seemed to occasion a good deal of pain and inconvenience. No bleeding followed, and she recovered, but slowly, as she was very weak and quite blanched by the loss she had sustained.

I have seen a very similar case of hemorrhage where a too large bougie had been thrust through a stricture.

I am of opinion that damage is often done by retain-

ing a bougie long in the stricture. I think very rarely much advantage is gained by keeping one in twenty-four hours; suppuration will result and ulceration is very likely to ensue; you do not obtain the same benefit as you do in stricture of the urethra. I will give one caution: if you wish to let the bougie remain in the rectum all night, take care to secure it by a tape. I have seen a short bougie pass up into the bowel above the stricture, out of reach, and considerable difficulty was experienced in removing it. I am in the habit of using a bougie of conical form. I pass it with the utmost gentleness, and only allow it to remain in the stricture for half a minute or a minute. If any pain is felt I take it out directly. I am confident, if the introduction is attended or followed by pain, desire to go to stool, discharge of mucus or blood, you are doing your patient harm; you excite inflammation and irritation and set up spasm. The stricture will be much more quickly dilated by using small-sized bougies and not keeping them in. It is not desirable to introduce the instrument more frequently than three times a week, and generally I think twice is sufficient if there is much irritability. Occasionally you may meet with a stricture of the rectum which does not seem to yield to ordinary means, and consequently you may be inclined to try more continuous dilatation; in these cases I employ one of Dr. Barnes's india-rubber bags, such as he recommends for dilating the os uteri. I have had them made for me very small, and I find they succeed better, and cause much less irritation than a solid instrument. They should be well greased, mounted upon a stilet, and passed through a speculum; by this means the ointment is not wiped off before it gets to the stricture. After the bag is introduced gently in-

flate, stopping short of causing pain; it may be retained all night, and the patient can easily remove it in the morning by letting out the air.

When a stricture is well dilated the patient generally experiences an immense amount of relief, but there is always the greatest tendency to relapse; there is even more danger of this than there is in stricture of the urethra.

Some strictures are so resilient that they return to their original condition directly you cease to dilate them. These are generally bridle or linear strictures, and they are often benefited by making several *slight* nicks into them, and then gently dilating. This operation I always keep for the last resource; it is by all means to be avoided if possible, as ulceration may, and I think often will, ensue, in which event your patient will be worse off than he was before.

I always tell sufferers from stricture of the rectum that even when they consider themselves well they should for years have an instrument passed once a month. I have recently seen a gentleman who came to me with a stricture, not a very bad one, five years ago. He got much better, and I strongly advised him to use the bougie himself; this he did for perhaps two or three years and then left it off altogether; I find now his disease has returned, and is decidedly worse than it was at first. It is well to instruct these patients in the method of passing the instrument for themselves, and you should be very particular in cautioning them in the matter of gentleness; insist upon them using elastic bougies, and always softening before inserting them. I had a case at St. Mark's Hospital which very much impressed on me the necessity for these warnings. I will relate it in full.

A woman had been in the habit of using an ordinary flexible bougie. One day she passed it standing up and without softening it; at the time she experieneed some unusual degree of obstruetion, and, to use her own words, "forced the instrument a little." She felt something give way and had severe pain. She immediately withdrew the bougie and a little blood followed; she felt very faint and broke out into a eold perspiration. Shortly after, the pain eontinuing severe, she sent to the hospital, and was visited by Mr. Grubb, who was then house-surgeon. He found her suffering aeute abdominal pain. (The instrument was passed at noon.)

I saw her with Mr. Grubb at 4.30 the same day. She was then eollapsed and had intense abdominal pain; there was great tenderness on pressure, her legs were drawn up, and she had frequent vomiting. She died during the night. The post-mortem was made next day. The peritoneal eovering of the bowel was intensely eongested, and with bright searlet patehes upon it. There was reeent lymph, thiek and soft, between the eoils of intestine. The pelvis eontained a quantity of grumous, eoffee-eolored fluid. A hole was found at the eommencement of the sigmoid flexure; the edges of it were blaek. On slitting up the gut a well-marked but dilated stricture was seen, eommeneing about three inehes from the anus; above the strieture was an irregular uleer with ragged edges, and through the bottom of this the bougie had been thrust, having safely traversed the strieture.

I once saw a case in which a nurse in giving an enema with a *flexible* tube, had thrust it through the intestine and injected gruel into the peritoneal eavity.

I think I have said enough to make it apparent that

stricture of the rectum is a serious disorder; it requires much gentleness and discretion on the part of the surgeon, and docility and perseverance on the part of the patient, to effect permanent good. The mere coarse thrusting of a bougie two or three times a week through the stricture is more likely to do harm than bring about an absorption of the effused material.

I think it is a good plan the night before the introduction of the instrument to let the patient inject some solution of belladonna and opium into the bowel.

In a very tight stricture, prior to passing the bougie, I often squirt up a little oil by means of an india-rubber bottle; this, I think, facilitates the operation, for, however much you may grease the instrument, it will nearly all be wiped off in passing through the sphincters.

I am of opinion that some strictures are syphilitic in their origin, and when they are the patients generally do well. This was probably a case of the kind. A sea captain, æt. 42, was sent to me by Dr. Clapton; he had these symptoms: Great straining and inability to empty the bowel; he never felt comfortable unless he had taken strong pills, and then in a few days he was as bad as ever; he generally passed broken lumpy motions, never properly formed fæces. He had not noticed any discharge of blood or matter, but he was not observant of himself, and the water-closet on board his ship was always dark.

He had some syphilitic-looking rash and sore throat; he also suffered a good deal from nocturnal gnawing pains in the bones of his legs and arms. He had been the subject of a chancre two years since, and had taken mercury for its cure; he had only one sore, and it was hard; he did not suffer from bubo or pain in the groin. On examining the bowel I found a firm annular stric-

ture, without any ulceration, two inches from the anus. I ordered him iodide of potassium and biehloride of mercury, and dilated the constriction; under this treatment he soon lost all difficulty with his bowels, and I had much trouble to persuade him to continue to use the bougie; however, when he went to sea, he took some with him, and promised me he would introduce one about once a week. On his return from Australia he came again to see me, having been absent about eleven months; he had passed the bougie very regularly on the outward voyage, but not at all on the passage home. On making an examination I found the rectum quite healthy; indeed, I could not detect even where the stricture had been. He told me that he felt quite well, his bowels acting freely and without any straining.

It occasionally happens, even after the stricture is well dilated, that the patient's symptoms are not materially relieved; this arises from the loss of power in the gut *above* the stricture, where probably it will be found much distended. This condition resembles the bladder after long retention of urine. It will recover itself in time. In these cases I recommend the abdomen to be well kneaded in the morning before going to stool, and also the following tonic and aperient pills: Ferri Sulph. Exsicc., gr. $\frac{1}{4}$; Quiniæ Sulph., gr. $\frac{1}{2}$; Ext. Nucis Vom., gr. $\frac{1}{4}$; Ext. Aloes Aq., gr. $\frac{1}{4}$; one to be taken three times in the day. These I find generally do good. I have also found galvanism very useful in restoring the muscular power of the colon and rectum. The negative pole should be introduced into the rectum, and the positive pole applied to various parts of the abdominal parietes.

However you treat strictures of the rectum, you must be prepared for much disappointment; they are far more formidable than strictures of the urethra, take a longer time to cure, and are greatly more prone to relapse.

CHAPTER XII.

PROCIDENTIA RECTI.

There is sometimes a confusion of ideas occasioned by the use of the words procidentia and prolapsus.

Internal hæmorrhoids, when they have come down outside the anus, are said to be prolapsed, and the case is frequently called prolapsus ani; but there is a very marked pathological distinction to be observed between prolapsed internal hæmorrhoids and prolapsus of the rectum.

Prolapsus is a descent of the very lower part of the rectum, the mucous membrane, and submucous tissue, both occasionally thickened, being turned out of the anus. Now, this differs from prolapsed hæmorrhoids thus: the hæmorrhoids exist as separate and distinct, rounded tumors, while the prolapsus may be seen to surround the anus without any division into definite tumors, only the natural folds of the bowel being observed; generally there is one distinct fold towards the perinæum, and the remainder forms a horseshoe-shaped projection around the sides and back part of the anus. The appearance and touch also of prolapsus differ from piles in its not being smooth, hard, and shiny, but soft and velvety.

If you thought fit you would operate upon such a case in the same manner as you would upon internal hæmorrhoids, with this exception, that the larger seg-

ment of the rectum will require to be divided vertically into two or three portions, in order that several ligatures may be applied to insure a complete strangulation of the part.

True procidentia is the descent of the upper part of the rectum, in its whole thickness, or all its coats, through the anus.

There is a variety of procidentia which one may call intussusception, the upper part of the rectum descending through the lower part; this is diagnosed from ordinary procidentia by there being a more or less deep sulcus around the inner column of the intestine, so that there are, as it were, two cylinders of rectum, one inside the other. This condition is often associated with, and caused by, the growth of a polypus; it gives rise to a train of very distressing symptoms, which may continue long after the removal of the growth which has been the starting-point of the malady. I have now a lady under my care, sent to me by Dr. Gervis, who some time since had a rectal polypus removed, but she still has great suffering; a burning, full sensation in the bowel, attended with tenesmus and difficulty in defecation. She has an intussusception of the upper part of the rectum into the middle and lower part; the bowel does not generally come outside the anus, but approaches, when she strains, near to it. I have seen many cases of this kind.

Sometimes a procidentia occurs conjointly with internal hæmorrhoids; in this case, when the procidented gut is gently returned, there still remains outside the anus a ring of hæmorrhoids, or loose and thickened mucous membrane; and I may mention that these cases are the most satisfactory to treat, as ligature of the hæmorrhoids will almost certainly cure the proci-

dentia. This was clearly shown by the late Mr. Hey, of Leeds.

Procidentia of the rectum is more often seen in children than adults, although it is by no means a rare affection in women—particularly those who have borne many children—and in men in advanced years. Procidentia in children is much favored by the formation of the pelvis, the sacrum being nearly straight. Moreover, all infants strain violently when their bowels act, even when their motions are quite soft. There appears to be some physiological necessity for this, which I do not pretend to explain or understand; but these facts are not sufficient to account for the proneness of children to this malady; there is always, in addition, some inherent weakness or extraneous source of irritation present by which excessive straining is caused. We may mention diarrhœa—often the result of strumous inflammation of the intestines, worms, stone in the bladder, phimosis, polypus recti, &c. There are many cases, however, to which we can assign no special cause, where the child is not manifestly unhealthy, and no source of irritation can be detected.

I am sure that the very bad custom of sitting a child upon the chamber utensil, and leaving it there for an indefinite period, as practiced by many mothers and nurses, is a fertile cause of procidentia.

In children the treatment is generally successful; it should first be addressed to the removal of any source of irritation; this accomplished, a cure is speedily effected. When no source of irritation can be discovered, the general health must be attended to. The child should never be allowed to sit and strain at stool; the motions should be passed lying upon the side at the edge of the bed, or in a standing position,

and one buttoek should be drawn to one side, so as to tighten the anal orifiee while the fæces are passing; this deviee I have found to be very useful; it is recommended in "Druitt's Surgery," but upon whose authority I do not know.

When the bowels have aeted the protruded part ought to be well sluieed with eold water, and afterwards a solution of alum and oak bark, infusion of matico, krameria, or weak carbolie aeid, should be thoroughly applied with a sponge; the bowel must then be returned by gentle pressure, and the ehild remain reeumbent for some little while, lying upon its faee on the eoueh, before running about. If there be any intestinal irritation, I generally order small doses of Hydrarg. eum Cretâ, with rhubarb at bedtime, and steel wine two or three times in the day. When the child is very ill-nourished, eod-liver oil does mueh good; the diet should be nourishing and digestible. If these mild measures do not succeed, I find the applieation of strong nitric acid the best remedy. Chloroform should be given, and the protruded gut well dried. The acid must be applied all over it, eare being taken not to touch the verge of the anus or the skin. The part is then to be oiled and returned, and the reetum stuffed thoroughly with wool; a pad must after this be applied outside the anus, and kept firmly in position by strapping-plaster, the buttoeks being by the same means brought closely together; if this precaution be not adopted, when the ehild reeovers from the chloroform, the straining being urgent, the whole plug will be forced out, and the bowel will again protrude. When the pad is properly applied the straining soon ceases, and the child suffers little or no pain. I always order a mixture of aromatic eonfeetion, with a drop or two

of tincture of opium, so as to confine the bowels for four days. I then remove the strapping, and give a teaspoonful of castor oil. When the bowels act the plug comes away, and there is no descent of the rectum.

I have experience of this treatment in a great many cases; I never knew it to fail if properly carried out, and only on two occasions have I had to apply the acid more than once. The result, also, is not a temporary but a permanent benefit.

Procidentia in the adult is a very much more unmanageable affection, and in many instances is quite incurable.

Numerous operative procedures have been recommended for the cure of this malady in its advanced stages, but I cannot say that I am satisfied with any of them; I have seen all fail. The application of fuming nitric acid, or, what I think I prefer, the acid nitrate of mercury, often does much good, although, unfortunately, the relief is usually only temporary; I have had patients to whom the acid has been applied frequently, and very thoroughly, without effecting a cure. The use of the acid in such cases is not at all painful if the skin be not touched; it only occasions a burning sensation, which soon passes off; as in children, the gut should be oiled before returning it, and the bowels should be confined for a few days.

In old persons, or in those who have a broken-down constitution, a very free application of the acid is to be deprecated, as a deep slough may form, some vessel be opened on its separation, and severe hemorrhage take place; this occurred to me at St. Mark's, in the person of an elderly woman of feeble powers; she lost very much blood, and the flux was only arrested by plugging the rectum. The same observation applies to the use

of acid to venous hæmorrhoids in old people. I saw a very profuse hemorrhage take place in an old man who had been a free drinker, and had great dilatation of the veins at the lower part of the rectum, probably depending upon a diseased condition of liver. It was not thought desirable to use the ligature, and nitric acid was applied; it formed a considerable slough, and bleeding commenced in four days, before, in fact, the slough had separated; this patient nearly lost his life.

A stricture of the rectum may result from the use of the fuming nitric acid; I have seen this occur on several occasions, and very notably in a girl at St. Mark's Hospital, to whom acid had to be applied three times, and in whom a stricture formed about three and a half inches from the anus; this gave us much trouble, as, although the bowel did not come down, the symptoms were quite as distressing.

I have used strong carbolic acid in these cases; it is not likely to produce a slough, and you may apply it frequently—in fact, every day, if you desire to do so; temporary benefit results, but the effect is not, in my opinion, so permanent as that derived from the acid nitrate of mercury.

In very bad procidentia good may be effected by dissecting off triangular or elliptical portions of the mucous membrane, and bringing the edges together with sutures of horsehair or carbolized catgut (I prefer horsehair). Care must be taken in performing this operation not to remove more than mucous membrane, for if you carry your knife into the submucous tissue you will get very profuse hemorrhage. If you like you can clamp portions of the gut, cut them away and use the actual cautery, or you may apply a ligature; I have tried all these methods, but I can only say that I have achieved

temporary success; the patient may leave the hospital very well, and you may congratulate yourself upon having effected a cure, but in a few months the bowel will again protrude, in all probability, as bad as ever.

Dr. Van Buren, of New York, has recommended in these intractable cases the application of the actual cautery to the gut in spots or lines, and also to the verge of the anus over the external sphincter muscle, so as to get contraction and thus support the bowel. This strikes me as a very good suggestion, and I shall certainly try it on a case where other means have failed.

The procidentia in the adult is sometimes very large; I have seen it in a woman larger in circumference than the fœtal head, and seven or eight inches in length.

I have had, in my own practice, seven cases of procidentia, in which there was a hernial sac in the protrusion, and in all it was perineal, as from the anatomy of the part, of course, it must be; you could return the intestine out of the sac, and it went back with a gurgle; four of these cases were in women and three in men.

Directly the bowel is protruded you can tell that there is a hernia also present by the opening of the gut being turned towards the sacrum; when the hernia is reduced the orifice is immediately restored to its normal position in the axis of the bowel. I have seen similar cases in the practice of my colleagues at St. Mark's, so the condition is not so very uncommon, but I have never found it in children.

In very old and bad cases of procidentia more or less incontinence of fæces always exists. There may be two reasons for this. 1st, loss of power in the sphincters; the frequent protrusion stretching these muscles so that they lose a great deal of their contractile power;

and 2dly, the mucous membrane gets so altered in structure as to lose, in a great degree, its natural sensitiveness; thus, when fecal matter comes into the lower part of the rectum, the sphincters are not stimulated to action, nor is the patient aware of its presence. It is in these cases, when, perhaps, all operative procedures have failed, that an india-rubber air pad, as an anal support, with a T-bandage, is of the greatest use and comfort to the patient, as without it the gut is always coming down, it gets ulcerated by exposure and friction, and walking is rendered impossible, or only to be undertaken with the greatest suffering.

Sometimes when a large portion of the bowel comes down, there is much difficulty experienced in returning it. I have found, on several occasions, that the passing up the bowel of a large flexible bougie, so as to carry before it the upper part of the descended gut, is of great service; gentle taxis should at the same time be used, and in this manner the mass can generally be returned. When the gut comes down, and the patient cannot get it back and does not seek assistance, it gets tightly girt about by the sphincter, great swelling takes place, and sloughing may ensue. I have seen many cases of this kind, but, as far as my experience goes, the sloughing is partial, and only the mucous membrane separates. After a few days' rest, with the buttocks well raised to favor the return of blood, the part can be replaced and considerable benefit may result. The only case I ever saw where anything like dangerous or deep sloughing took place was in consultation with a medical man who had most assiduously and constantly applied a bladder of ice to the protruded part, and this had so much favored sphacelus that nearly the whole mass came away, and there was free

secondary hemorrhage. In this case the sloughing was so considerable that a very intractable stricture resulted. This shows the necessity of care in the application of ice; if it be too long continued, or if the patient be old or of feeble constitution, dangerous results may ensue.

I am not aware of any internal remedy which is of much use in cases of procidentia, but small and frequent doses of opium with confection of black pepper benefited some of my patients.

A nasty teasing diarrhœa is very commonly present, and as well there is a discharge of mucus, which keeps the linen always damp, and adds not a little to the general discomfort. Powdered acorns I have used frequently with advantage for the diarrhœa. The acorns should be baked, grated to powder, and the dose is one teaspoonful in half a tumbler of milk every morning. I have found this answer better than either gallic or tannic acid.

The frequent and bountiful application of cold water in these cases is to be most strongly recommended. Ordinary astringent lotions are not more useful than this.

CHAPTER XIII.

PRURITUS ANI.

Pruritus ani, or as it may be well called, painful itching of the anus, is a most distressing malady. I have often heard a patient say that his or her life was rendered almost unendurable by it. In fact one very nervous invalid told me that unless he had obtained relief he believed that he should have gone out of his mind. It is very intractable, but I am confident that it is always curable if the patient will strictly, patiently, and persistently follow the advice of his medical attendant.

The disorder is frequently induced, or at all events kept up, by habits of too free eating and drinking, and its successful treatment therefore calls for a considerable amount of self-denial on the part of the patient; and so it often happens that as soon as the sufferer gets relieved he forgets all his prudent resolutions and relapses into his old ways of life; this is pretty certain to result in the return of his enemy in full force. He usually then blames his doctor, very rarely himself, and either gives up in despair all hope of cure, or seeks new advice, so that the affection comes to be considered as not only an exceedingly troublesome one, but almost incurable. I can truly state that I have rarely, if ever, failed to cure a patient who adhered rigidly to my directions; and when a person the subject of bad pruritus

comes to me I always say, unless you intend to conform most religiously to my dicta as long as I think necessary I cannot cure you, and I had much rather that you consulted some other surgeon. Although, as I have said, free living often induces pruritus, I have met with many cases in very abstemious persons; I have seen a most ascetic clergyman suffer dreadfully, and I have had under my care a lady who nearly all her life has been a total abstainer from alcohol, and is a remarkably small eater, yet she has been quite a martyr to this complaint.

The irritation in the majority of cases is worse at night, especially when the patient gets warm in bed, so that often the greater part of the night is rendered sleepless and inexpressibly wretched; towards the morning, irritable and worn out, he falls off into a fitful slumber, from which he often awakens himself by scratching; this of course makes the part more or less raw, and materially adds to his discomfort in the daytime. I need scarcely say that the more the sufferer scratches the worse he makes himself, although it is very difficult indeed to avoid seeking the temporary relief it affords. Many persons have told me they would infinitely prefer decided pain to the dreadful and constant itching they have to endure, which really, after a time, becomes pain of a most sickening character. Excitable people are often greatly troubled in the day as well as at night, the itching setting in badly after exercise or on leaving the cold air and coming into a warm room.

Doubtless there are many cases of pruritus for which we are unable to assign any cause, and it may then be considered as a pure neurosis; but usually it is possible to discover some reason for the irritation in derange-

ment of other organs. These causes may be mentioned: liver affections, internal hæmorrhoids, constipation, anything causing pressure upon the hæmorrhoidal veins so as to retard the return of blood from the rectum, disorders of the stomach induced by errors in diet, latent gout, uterine diseases, and we must not forget parasites; as vegetable growths, pediculi similar to those found on the pubes; and ascarides.

It is generally stated that there is very little alteration in the aspect of the part affected, and nothing is to be observed beyond a roughened, thickened, and more rugose state of the skin just around the anus. This I think is by no means usually the case; sometimes there is a distinctly eczematous rash, the part being always moist from exudation; at others there is a dry rugose condition, with bright redness consequent upon scratching; occasionally there are a quantity of minute scales to be seen forming irregular rings; but what I consider the characteristic condition—which may always be noticed when the disease is severe, and has lasted for any length of time—is the loss of the natural pigment of the part. To such an extent does this often obtain, that patches around the anus, extending backwards as far as the sacrum and forwards to the scrotum, are of a dull dead white, the skin looking more like very white parchment than natural integument, and if you pinch it up you will feel that it has lost its normal elasticity. I have seen a similar condition induced by the genital pruritus of women.

When considering a case as to the question of treatment it is always important to discover the cause of the irritation; particular articles of diet or drink affect some persons in a remarkable manner. I once had a patient who invariably got an attack of pruritus from

eating lobster or crab, and of these shell fish he was inordinately fond, but rarely dared to indulge his taste. I have seen a similar result from salmon. Another of my patients was sure to suffer if he drank any quantity of champagne or ale, and the irritation once started was very difficult to arrest. There is but little doubt that excesses at table, combined with a want of active exercise, is not only a predisposing but also an exciting cause. Excessive smoking is another exciter of the disorder; I have seen several instances (where patients had a tendency to the malady) of over indulgence in smoking being followed immediately by an attack of pruritus.

Spare no pains to investigate closely the habits of your patient. Stout plethoric people should be put on a rather low diet; they should avoid all rich and highly seasoned dishes, eat but little meat, and take fish, poultry, vegetables, and ripe fruits. Interdict both beer and spirits, and restrict the drinking to a little light sherry or claret and Vichy or seltzer water. Coffee should be given up, weak tea or cocoa being taken at breakfast. Enjoin a walk of three or four miles daily, and, if possible, at such a speed as to induce slight perspiration; let the patient take a sponge bath every morning, a warm or Turkish bath once in the week, and every night when retiring to bed wash the anus and parts around with warm water and yellow soap. If the bowels are at all confined the following prescription will be found beneficial: Magnes. Sulph., ℥j; Magnes. Carb. pond., gr. v; Vini Colchici, ♏v; Syrupi Sennæ, ℥j; Tinct. Cardam. comp., ℥ss.; ex Inf. Chiratæ, ℥j, twice or thrice in the day; and I also often order Pil. Plummer., gr. ij; Pil. Rhei comp., gr. iij, to be taken every other night for a week. After the washing at

night let the patient apply this ointment freely: Hydrarg. Subchlor., gr. x; Ung. Sambuci, ʒj; or this lotion, which is very efficacious in allaying irritation: Sodæ Biboratis, ʒij; Morphiæ Hydrochlor., gr. xvj; Acidi Hydrocyanic. dil., ʒss.; Glycerinæ, ʒij; Aq. ad ʒviij. M. Dab the part frequently. A chloroform pomade made thus is often useful: Chloroform, ʒij; Glycerinæ, ʒss.; Ung. Sambuci, ʒiss. Misce.

Every treatment may for a time be disappointing, and in long-standing cases you must be prepared to alter your remedies until you find what best suits your patient. In old and feeble persons the combination of the sulphates of iron and magnesia with dilute sulphuric acid and infusion of quassia often does good. I have recently cured an old gentleman whose remnant of life was thoroughly embittered through pruritus ani of long standing. When he came to me the anus and the surrounding parts were quite raw and discharging an ichorous irritating fluid. The tonic and laxative mixture just mentioned and the borax lotion, with great attention to washing the part with warm water and Castile soap soon worked wonders for him, and he is now able to enjoy himself in a way he has not done for years.

When you have made up your mind that the essence of the disease is in the nerves themselves, as I think it often is, particularly in spare and delicate, excitable people, you should give arsenic and quinine freely, and be prepared to push them to their physiological effect. They may be taken separately or combined. I have rarely failed to cure this class of case by these remedies if persevered in; at the same time, of course, using local means to allay irritation. In obstinate, old-standing cases I usually commence the treatment by rubbing

the parts thoroughly with a solution of nitrate of silver, ℈ij to the ounce; this softens the skin and induces a more healthy action and secretion. At times I have found Condy's fluid, undiluted, useful for the same purpose; it should be applied twice or oftener in the week.

The disorder is not, by any means, so common in women as in men, nor is it frequently met with in young persons; but one of the most obstinate cases I ever had occurred in a delicate lad of seventeen. There did not appear to be any ascertainable cause for the irritation, and he was eventually cured by Liquor Potassæ Arsenitis in full doses and cod-liver oil. I had once a very intractable case in a man nearly eighty years of age, who was an inhabitant of the Bookbinders' Almshouses at Kingsland; it resisted all remedies for some time, but eventually yielded to arsenic internally and the strong caustic solution frequently applied. In women the uterine functions should be attended to, and I have frequently found the citrate of iron, quinine, and strychnine very advantageous.

I have met with a good many examples of latent gout as a cause of pruritus ani.

A gentleman was under my care some time ago who had often suffered from pruritus, and always got rid of it when gout attacked him, and he was free for some time afterwards. Here diet is a most important element in the treatment. I think the irritation is best allayed by a weak solution of bicarbonate or bisulphite of soda frequently applied. I have formed a good opinion of the usefulness of lithia water or the effervescing citrate of lithia. In some cases, where the irritation is very severe, colchicum with alkalies answers best, but, if it can be managed a course of

waters at Baden-Baden, Ems, or Carlsbad, will be found most beneficial.

I have a very excitable nervous patient who frequently gets an attack of pruritus when he is mentally overworked or irritated, and in this and similar cases I have found the bromide of potassium very advantageous, and I have combined with this ten or fifteen grains of the hydrate of chloral to be taken at bedtime; it then generally insures a fair night. An extended experience in this class of case has induced me to think most highly of the bromide of potassium and chloral in combination. In alternation with the chloral I have seen great advantage result from the Succus Conii in full doses (one to two drachms given three times in the day); to this may be added cod-liver oil after meals, by which means I think you may repair nerve tissue and induce a more regular distribution of nerve force. I am fully convinced that the more you treat pruritus ani as a general disease the more successful you will be; the difficulty in curing it has arisen in great measure from its having been considered as merely a local affection, and local means having only been applied for its relief.

In the treatment of pruritus ani it is well to avoid the internal administration of opium in any form; you may procure a night's rest by its use, but you pay dearly for it afterwards in an increase of the disorder. When the irritation is so great that the patient is quite worn out for want of rest, I have for years past recommended the introduction into the anus at bedtime of a bone plug, shaped like the nipple of an infant's feeding-bottle, with a circular shield to prevent it from slipping into the bowel; the nipple should be about an inch and a half in length and as thick as the end of

the forefinger. This is most efficient in preventing the nocturnal itching; a good night's rest is almost sure to result from its use, but I only advise it to be worn every other night. I presume that it benefits by exercising pressure upon the venous plexus and filaments of nerves close to the anus. The idea of this plug occurred to me from several of my patients telling me that the only way they could obtain relief and sleep, when the itching was very bad, was by introducing the end of the forefinger into the anus and making pressure; this instantly arrested the irritation.

When pruritus is accompanied by internal hæmorrhoids, their removal almost always cures the itching; this was well shown in a very bad case operated upon by me in the practice of Mr. Gervis of Haverstock Hill. The irritation had been present for a long while, and it had resisted all kinds of treatment, but yielded when the piles were got rid of.

Pruritus caused by a parasitic vegetable growth is readily cured by the application of sulphur ointment; or, what is much cleaner and equally efficacious, a lotion of sulphurous acid of the strength of one part to six of water.

I had some time ago a very obstinate case of anal irritation in an adult which was caused by ascarides. I really did not suspect this to be the origin of the malady, but I happened to see one of the worms just at the orifice; a brisk purge, and a few injections of a solution of iron freed the patient of the parasites and the pruritus also. It is always well to bear in mind the possibility of these causes of the disorder.

CHAPTER XIV.

IMPACTION OF FÆCES.

A COLLECTION of clayey fæces may form in the cæcum or in any part of the colon, but it is usually called impaction when the accumulation takes place in the pouch of the rectum immediately above the internal sphincter muscle. This is its most frequent situation, and here a very large deposit is often found more or less globular in shape. It occurs in females more commonly than in males; old women, and women shortly after their confinements, being especially liable to it. In aged people, very often one of the first indications of failing nerve power is shown by loss or diminution of the contractile force of the colon and consequent inaction of the bowels, leading to impaction.

I have seen some cases of impaction in hysterical young girls and in middle-aged females. I have also met with it in elderly men; but I do not remember ever having had a well-marked example of this disorder in a young man, but I have found it occur more than once in children; recently I saw a little boy only three years of age who had a veritable impaction which gave a good deal of trouble, but when it was removed, the bowel soon regained its tone, and regular action was afterwards easily kept up.

The cause of the accumulation I believe nearly always to be, primarily, a loss of power of the muscular

coat of the rectum. This loss of power may have been produced by the pressure of a child's head during a long-protracted labor or by over-distension of the bowel through habitual neglect of the calls of nature, in which case the collection may be the result of months' costiveness, and the rectum much resembles in its condition a bladder paralyzed from retention of urine.

Spasm of the sphincter has been said to be a cause of impaction, but I have never been able to satisfy myself that the reverse was not the case, and the impaction the cause of the spasm. In impaction, spasm of the sphincter always exists; in some instances to such a degree that when the patient strained I have observed the anus protruded like a nipple, and an injection returned in a fine stream as if coming out of a squirt. I have certainly met with cases of idiopathic spasm of the sphincter usually in elderly nervous single women, but in none of these persons was there any impaction, although there was costiveness.

The symptoms of impaction are not uncommonly very obscure, and the malady may be mistaken for something else. I was once called in to see a lady laboring under impaction, and found that an eminent physician had recently declared her to be suffering from neuralgia of the bowel, and had ordered her quinine and steel, and I have heard of another case which was treated as gout in the rectum. I have met with several patients who were supposed to be the subjects of malignant disease of the cæcum or sigmoid flexure, from the fact of there being a tumor present, and from the patient's aspect, which is frequently very suggestive of cancer. I had a very marked case of impaction in a girl thirteen years of age, which was supposed to be

enlarged mesenteric glands, and was being treated with steel and cod-liver oil. I attended a gentleman who was believed by his physician to have incipient disease of the brain, so much nervousness and hypochondriasis resulted from a very loaded colon and impacted rectum. I had a case in a young lady which was said, by more than one medical man, to be phthisis, constant cough being present, with hectic at night, and much emaciation. And lastly, a very common but sad error is committed: these patients are treated for diarrhœa with tenesmus, as a considerable fluid discharge from the bowel is not at all incompatible with great retention of solid fæces.

In the history of these cases it is not rare to find that severe pains have been experienced in the right lumbar and inguinal regions: this points to the fact that the cæcum has been the seat of obstruction and distension, and that when this was removed, the fæces again lodged in the rectal pouch. The symptoms of impaction might be expected to be generally those of obstruction, and to resemble in many respects those of stricture of the rectum, and sometimes this is so, but the absence of any jelly-like or coffee-grounds discharge is an important point to be noticed in the diagnosis. The patient often really complains of a tendency to diarrhœa, liquid motion being frequently passed, especially after an aperient, but without any sense of relief, and on assuming the erect position, straining, severe, continuous, and irresistible, takes place. On lying down, this generally gradually passes off.

Dyspepsia, irritability of temper, nervousness, and despondency, the patient supposing himself to be suffering from an incurable malady, a very muddy-yellow skin suggestive of malignant disease, morning vomit-

ing, and a loathing of all food as soon as a few mouthfuls have been taken, excessive and very painful thirst, are among the common symptoms of this disorder. A peculiar ringing, barking cough, particularly in women, and also night-sweats, are not uncommon. In both men and women I have seen very obstinate retention of urine caused by impaction. All these symptoms may continue more or less urgent for months, and aperients and injections may be given without affording more than temporary relief.

When examining a patient, if you make careful palpation over the abdomen, tumors may be felt in the cæcum, the transverse colon, or the sigmoid flexure; under any circumstances, in the majority of cases, if you look at the anus you will see that it is nipple-shaped, and if you feel around the anus you will find the sphincter muscle tightly contracted and as hard as a piece of wood. It is only with difficulty that you can introduce your finger into the bowel, and, having done so, you will find a ball of hardened clayey fæces filling up the rectal pouch. This ball I have seen almost as large as a fœtal head, and quite movable, so as to admit of liquid or thin motion passing round by the sides of it, thus giving rise to the impression that diarrhœa rather than constipation existed. So deceptive is the feeling this mass gives to the finger, that I have more than once thought I must be touching a tumor; and I have been called in consultation several times by medical men, who had discovered the impaction, but could not believe that what they felt was only a collection of fæces.

You must commence the treatment of this malady by thoroughly breaking up the ball of the fæces. The best mode of accomplishing this is first to forcibly but

slowly dilate the sphincters by introdueing both your forefingers well oiled, and separating them towards the tuberosities of the ischia; the pain of the operation, if done very slowly and carefully, is not nearly so great as it is in fissure, and you need not tear the mucous membrane, but you so streteh the muscles as to paralyze them for a time; this done you can get at the interior of the rectum without any diffieulty, and break up the mass with your finger, or a lithotomy seoop, or the handle of an old-fashioned silver spoon. The spasm of the sphincters being thus overeome, you cause your patient but very little pain in your further manipulations, and you ean do a great deal at one sitting.

After you have thoroughly broken up the impaeted mass you may administer injections of soap and water and oil, and in this way you will often get rid of enormous quantities of fæees. When the ball oecupying the reetal poueh is cleared away, other masses generally come down, and I have seen as mueh as two or three ehamber utensils passed at one operation. I have found, in several instanees, the reetum so mueh dilated that the upper part of the bowel opened into the poueh like a pipe into a bladder.

It is often a considerable time before the rectum recovers its power after its great distension, and, therefore, you must take eare that no reaeeumulation takes place. Injeetions of eold water, kneading the abdomen, and the exhibition of the eompound decoction of aloes with nux vomiea, will be found useful. As soon as the bowel is thoroughly eleared out I am in the habit of prescribing the following pill, which is very effeetive in restoring power to the eolon and rectum, and thus inducing a regular action of the bowels: Ferri Sulph. Exsicc., gr. ¼; Quinæ Sulph., gr. j; Extracti Nucis

Vomicæ, gr. ¼; Ext. Aloes aq., gr. ⅓; Extr. Taraxaci, q. s. ut fiat pil.; take one three times in the day after meals.

Persons of sedentary habits are very liable to these attacks, so exercise in the open air must be taken daily.

The diet should not be too liberal. An elderly lady has been a patient of mine on three occasions with impaction and loaded cæcum, and I am sure it is because she is a very hearty eater and never takes any exercise. I can neither persuade her to walk more nor to eat less.

Impactions have, as I have mentioned, been often mistaken for malignant abdominal tumors, but the diagnosis is usually not difficult if observations be carefully made. There are two points of distinction which may always be noticed: 1st. An examination from time to time will show that the tumor differs in size and shape—this the patient will often be the first to remark; 2d. A very careful manipulation will detect that the tumor is irregularly soft, and has a decidedly doughy feeling. When the tumor is in the sigmoid flexure or rectum the introduction of the finger will at once clear up the doubt, if there be any.

Concretions in the bowel are more rare than impactions, and they differ from these in that they are often formed round some foreign body, and are usually cylindrical in shape. Concretions consist of animal and vegetable fibres matted together around a nucleus, which may vary according to circumstances. In one case a quantity of human hair formed the core; the patient had been in a lunatic asylum, and in a fit of mania had swallowed the hair. She had suffered from attacks of intestinal obstruction for months, and she always said there was something in the bowel which would not pass through the anus. She was brought

to me at St. Mark's Hospital. I forcibly dilated her sphincter, and with a lithotomy scoop and my finger succeeded, after some trouble, in removing a conical-shaped mass more than six inches in length by two inches and a quarter in diameter; it was covered with pus and awfully fetid. On cutting through it, as I have mentioned, the centre was found to consist of human hair.

Another patient of mine, an elderly gentleman, had an obstruction of the rectum which I thought was an ordinary impaction, but it was not globular in form, and when I tried to break it up I could not do so, as it slipped away and was too tenacious. I was, after dilating the sphincters, enabled to get hold of it with a pair of lithotomy forceps and gradually draw it out. The nucleus was a large biliary calculus, and around it were vegetable and animal fibres and dried fæces; the whole was covered by a thick coating of mucus and pus. Eighteen months before he had suffered an attack of gallstone, and no doubt this calculus had then lodged in the bowel, probably in one of the sacculi of the colon.

One more case I will relate, as it is peculiar; here a sovereign formed the nucleus. The patient, a woman, came to St. Mark's Hospital suffering from stricture of the rectum; when I dilated the stricture I found a large mass above it. Purgatives and enemata not effecting its removal, I eventually brought it down with a scoop and my finger; it was cylindrical in form. On tearing it up to examine its structure I found in its centre the coin I have mentioned. Quite fifteen months before the woman had swallowed a sovereign, and she had sought for it in her motions, but failed to find it; she had not any idea that it had not passed. I think it very likely that at that time she had incipient stric-

ture of the rectum, and consequently the piece of money did not escape from the bowel.

I will not occupy more space on this subject; the cases are somewhat rare, and the treatment simple enough. When the mass comes down near the anus it must be removed bodily; you will find it so tenacious that you cannot break it up like an ordinary impaction. Unless you dilate the sphincter you will have very great difficulty in extracting these concretions; in fact it is almost impossible to do so.

It is very curious how, sometimes, small substances fail to traverse the alimentary canal safely, and how, at other times, very large bodies pass without producing any severe or dangerous symptoms. There are cases related by Sir James Paget, Mr. Henry Smith, and others, where a considerable portion of a set of false teeth mounted in gold was swallowed, and not arrested anywhere in the intestines.

There is one thing we should recollect when such a case comes before us—that is, never give a purge. You may tell your patient to eat very freely of solid material, such as suet pudding, bread, and the like, so as to form full-sized cohesive motions.

These cases must not teach us to think lightly of the swallowing of foreign bodies; many cases are on record where such a simple matter as a cherry-stone has caused death, by setting up ulceration and perforation of the bowel.

CHAPTER XV.

CANCER OF THE RECTUM.

This is a subject one approaches with much pain and reluctance, as, unfortunately, we know no means of removing the disease, and our powers of delaying its progress, or even alleviating the suffering it causes, are but comparatively slight. There is no disease which "human flesh is heir to" more painful than cancer of the rectum. Occasionally one meets with a patient who does not appear to suffer so exquisitely, but this is an exception to the rule. In the more advanced stages of the malady the pain is unremitting, and temporary relief is only to be obtained by the use of powerful sedatives and narcotics.

Cancer is more commonly met with in middle age, but I have seen encephaloid, very rapidly fatal, in a lad of seventeen, and there was some time back in St. Mark's Hospital a boy not thirteen, under the care of Mr. Gowland, suffering from undoubted cancer of the rectum. I have met with scirrhous and epithelioma in very old people. It is usually said to attack women more frequently than men; the reverse has been my experience with regard to the rectal affection. I cannot say that I have any knowledge of what causes cancer of the bowel, and I have but rarely been able to trace it to hereditary taint.

The forms of malignant disease of the rectum are

generally described as scirrhous, encephaloid, colloid, and epithelioma. I should be inclined to say, from my own observations, that the distinction of scirrhous, and encephaloid is rarely well marked; occasionally you get a case of pure scirrhous, and at times you may see an example of undoubted encephaloid; but, as a rule, cancer is found as a circumscribed deposit in the submucous connective tissue, forming a tumor. It is more or less hard; probably harder in some parts than others, and usually ulcerated at its summit to a greater or less extent. There is a peculiar feel about cancer of the rectum, which distinguishes it from simple ulceration, although in that you may have induration and nodules with enlarged glands. The "peculiar feel" is soon recognized by practice, but it is very difficult, and I think impossible to describe.

The tumor is generally seated within three inches from the anus, and it may be situated either dorsally or over the prostate gland—the latter I have found a frequent locality. It is rounded and elevated half an inch or more above the surface of the bowel. The edges of the ulcerated summit are hard and ragged, but the mucous membrane surrounding the tumor is generally quite healthy. On looking at the ulcer with a speculum, you will see that it differs materially from ordinary ulceration, not being red, glazed, and of even surface, but sloughy, dark-colored, and with its floor irregularly ulcerated or eaten away; and, added to this, one must mention the odor, which is characteristic and often quite distinctive, and this, like the feel, cannot be described. When the disease is more advanced the ulceration and infiltration may be found to extend all round the bowel; frequently just within the anus a hard brawny collar of deposit is to be felt. The ulceration

spreads upwards and downwards, but rarely involves the outlet of the bowel, the rectal glands become affected, and also indurations may form in the groins; coincident with this, marked blood-poisoning occurs, and secondary deposits take place in the liver, mesentery, ovaries, lungs, and other organs. Perforations into the male bladder, the vagina, and peritoneum, also may result from the extension of the process of ulceration.

When the disease is encephaloid, often a large softish tumor is to be felt blocking up the rectum; this may, and frequently does, break down with very great rapidity, and the patient soon succumbs to the influence of the cancer poison upon the system, and the effects of secondary deposits. I have seen a patient die in six months from the first symptom of pain and discomfort in the bowel. On the contrary, in scirrhous you may have a tumor form in the rectum (I think most commonly over the prostate gland), and this may grow so slowly and affect the constitution so slightly that the patient may live for years. I will relate a case of this kind.

A man of not at all unhealthy appearance came under my care at St. Mark's Hospital in the year 1865. He had suffered more or less from symptoms of obstruction in the bowel for five or six months. An examination per anum detected a hard, solid mass, appearing to arise from the neighborhood of the prostate gland; it blocked up the whole rectum; the surface was rather irregular, but not ulcerated. I thought it might possibly be hydatid, although no fluctuation could be felt; but a long exploring trocar thrust into it did not reach any fluid. He had suffered entire constipation for twenty

days, and his symptoms were so urgent that I at once performed colotomy. He returned home in six weeks very comfortable, and he lived for four and a half years, dying at last from the extension of the disease and consequent exhaustion. No ulceration took place in the tumor, until quite four years subsequent to the colotomy.

The early symptoms of cancer are sometimes obscure, and differ according to the situation of the growth and its condition as to ulceration.

The first indication may be, and often is, diarrhœa, with difficulty in retaining the motions. The discharge, before the growth ulcerates, is passed when the bowels act, and may be only slimy and slightly tinged with blood; in the more advanced stages of the malady it is very profuse, and resembles coffee-grounds mixed with pus; the smell being very fetid and, as I have stated, peculiar.

It is not often that a surgeon sees cancer of the rectum in its very early stage. Usually until ulceration commences, especially when the growth is not near the anus, there is very little pain or discomfort, and as a rule the patient is robust and healthy-looking, and does not know or think that anything serious is the matter with him.

A few months ago a gentleman came into my consulting-room to be examined for life assurance. In every respect you might have said he was a model of a robust-looking man of middle age. He was muscular, firm, and not fat, his eye was bright, his countenance ruddy and cheerful, his tongue clean, he had a good equable pulse, and his lungs were unimpeachable.

To all appearance he was just such a life as one would accept gladly at "average rates;" but it happened in the course of examination that it came out, rather accidentally, that he was subject to occasional diarrhœa, after which he said he always felt better; this led me to ask a few questions as to the functions of the bowels, and to my coming to the conclusion that he probably had some ulceration of the rectum. I then requested to be allowed to examine him; he assented, and I found what I had no hesitation in diagnosing as cancer. Of course I did not inform this gentleman of the serious character of my discovery, but I wrote to his family medical attendant. Some time afterwards I saw him in consultation with his surgeon, and I found that the disease was advancing rapidly, his constitution was already beginning to suffer, and I had no doubt the malady would run a rapid course.

It has often been quite a shock to me to examine a patient who only thought he had some trivial disease of the rectum, and to find that cancer was present. I once saw an eminent member of our profession who died from that disease, and who had made arrangements to lie up and undergo an operation for what he believed to be a slight anal fissure, or an ulcerated hæmorrhoid.

Unless a careful examination of the rectum be made, cancer may be overlooked and errors in diagnosis made. I could relate many cases in which fistulæ and hæmorrhoids have been operated upon, when at the same time malignant disease existed. I need scarcely say that the patient's sufferings were aggravated by this mistake. Here is a case:

R. F—, æt. 50, admitted into St. Mark's Hospital

October, 1866. He began to be ill the latter end of May. He looks thin and feeble, but says he has only recently lost flesh and become so weak. He had a fistula form about three months back, and was operated upon; it did not heal, and a second operation was performed a few weeks ago; still he did not get any better, and the medical man who operated said there was another sinus requiring to be opened, and that if he would consent to have that done he would soon get well. The patient, however, could not afford more doctoring, and thought he should like to come to St. Mark's Hospital. When I saw him he complained of constant diarrhœa, he had incontinence of fæces, and could only pass his water when he went to stool; he was nearly always in pain, and there was a very copious discharge of blood and matter from the bowel. On examining him I saw on the left side of the anus a deep open wound running toward the perinæum, and on the right side there was a smaller wound and the orifice of a fistulous sinus; around the anus were several club-shaped, shiny, inflamed tabs of integument. One glance was sufficient to show me that this patient had something the matter with him more than fistula, and on passing my finger into the rectum I found, high up, a mass of malignant ulcerated growth. He died very rapidly, not living more than twelve months from the first symptom of the disease.

Not long ago I saw, with my colleague, Mr. Alfred Cooper, a patient upon whom an eminent hospital surgeon had proposed to operate for piles. The case was afterwards sent to Mr. Cooper for his opinion as to the propriety of the operation, and on examination he found extensive cancer of the rectum as well as the

hæmorrhoids. The surgeon had not thought it necessary to examine the interior of the bowel, and hence the error.

My friend Mr. Blackman sent me a very interesting case, about which there had been some doubt as to the diagnosis. This lady had for some months suffered from severe burning and gnawing pain in the sacrum, which very much destroyed her rest at night. She experienced the sensation of never having emptied her bowel, although she had six or more actions daily. The motions were lumpy and expelled with great force and wind. She could not retain herself a moment when she wanted to go to stool, but was compelled to rush to the water-closet directly. She had at times a slimy discharge.

On examining her nothing was to be seen externally; the anus looked quite healthy; but on introducing the finger it was found to be patulous, and the sphincters to have little power; nothing could be discovered until the finger was carried high up and the patient encouraged to strain down, then a hard ulcerated growth could be felt nearly blocking up the bowel. The speculum showed a sloughy, deeply ulcerated tumor. There was the characteristic odor present, and no doubt could be entertained as to its malignancy. Later in the progress of the malady colotomy was proposed to relieve her suffering, but it was declined, and she died in less than two years from the commencement of her illness.

I have met with but few well-marked cases of colloid cancer, and those I have seen have been very rapidly fatal, and secondary deposits have occurred early in the malady.

Epithelioma is in my experience a rather rare form of cancer attacking the rectum. When it is found at the margin of the anus—where it resembles to a remarkable degree epithelial ulceration of the lip—it may be excised with a very fair prospect of success. More than three years and a half ago I removed a small growth of this character from the entrance to the bowel of a man aged 50, and I afterwards applied a very strong solution of chloride of zinc. I saw this patient about twelve months since, and there was then no return of the disease, and the cicatrix was healthy and free from induration. This is not the only satisfactory case of the kind I have had.

The treatment of this fearful malady resolves itself, for the most part, into an attempt to assuage the sufferings of the patient. Pain generally is mitigated by the recumbent position and good, easily digestible, nourishing diet. All kinds of sedatives and opiates may be taken internally, when one loses its effect another being substituted; but, after all, there is nothing equal to opium in its various forms. Hypodermic injections of morphia I have seen answer best and be of use longest; sedative ointments, suppositories, and injections into the bowel are useful, but sometimes they cannot be retained, and at others they seem not to have the slightest effect.

When cancer affects the rectum close to the anus, the disease being within the grasp of the sphincter, very much pain is occasioned, and in these cases a division of the muscle will afford most marked relief; this treatment is more particularly applicable when the ulceration or growth is confined to one side of the bowel. The incision should then be made through the

uninvolved tissues, and great benefit may be expected to accrue.

In any form of cancer, save epithelioma, I do not think excision can be recommended; in the very earlier stage you cannot be sure that the disease is cancerous, and when ulceration is present you would, in all probability, not be able to remove the whole of the diseased structure.

I have made a very full trial of the injection of acetic acid, but I never saw it do any good; on the contrary, it caused much increase of pain.

I have never seen any benefit derived from the application of caustics within the bowel; but when the cancerous mass protrudes, I have relieved pain and got rid of a good deal of the growth by using the arsenite of copper with mucilage as a paste. This destroys rapidly without increasing the suffering, and it is quite free from danger. I can recommend it strongly, having employed it on many occasions.

For months I exhibited to eight patients the chloride of calcium scraped out of oyster-shells, as advocated by Dr. Peter Hood, but neither good nor harm resulted from it. There is no single remedy I ever saw mentioned or heard of that I have not made trial of, but I am sorry to say I never saw a particle of curative effect from any drug or any system of medicine.

When the bowel gets quite obstructed by the growth, or when an opening has taken place into the bladder, or even when the pain from the passage of fæces over the cancerous surface is very intense, lumbar colotomy may be performed with advantage. I will not say that life can be always materially prolonged by the operation, but I am confident that the suffering of the patient will be much mitigated. I do not recommend

colotomy in malignant disease so strongly as I do in ulceration and stricture, but I have performed it now sixteen times for the relief of cancer, and I cannot say that I ever regretted operating.

The mode of opening the colon now generally adopted is known as Amussat's, and was advocated by that surgeon in his treatise, published in 1839, "On the Possibility of Establishing an Artificial Anus in the Lumbar Region." It is by no means certain, however, that he ever performed the operation. In the adult I think there can be no doubt that Amussat's is the best procedure.

By attention to certain rules, lumbar colotomy will not be found very difficult; but the not infrequent occurrence of misadventures induces in my mind the belief that many surgeons are not yet sufficiently alive to the necessity for considerable precision in the performance of this operation, more especially when the bowel is undistended.

Only a few years ago the operation was never undertaken unless there had existed entire obstruction for a long period, and consequently the gut was pretty sure to be fully distended; under which circumstances it could scarcely fail to be readily found. Now, however, an early interference is known to be very desirable on many grounds, and the operation is therefore frequently performed when there is a probability that the colon will be empty and collapsed, and then the difficulties may be such as to baffle the best of operators, unless he knows precisely where to seek for the intestine.

The directions usually afforded in works on surgery lack the essential element of precision, which I think indispensable. The error usually made is to search for

the colon too far from the spine; the result of this is that the peritoneum is inadvertently opened, a coil of small intestine at once shoots up into the wound: this misleads the surgeon and renders the discovery of the colon more difficult as well as the operation vastly more likely to prove fatal.

The anatomical guide to the position of the ascending or descending colon is the free edge of the quadratus lumborum muscle; but this is by no means always easily found, and consequently it is better to substitute a more certain and unmistakable guide, and this, as I have stated in my article on colotomy in the "St. Thomas's Hospital Reports" for 1870, may be obtained by marking a spot on the crest of the ilium, full half an inch posterior to its centre, measured between the two superior spinous processes.

From more than fifty dissections and the experience of over thirty operations, I can confidently assert that the colon is always, normally, situated opposite this point.

Before operating, I mark this spot upon the crest of the ilium with ink or iodine paint, and I have always found it, when the superficial tissues are divided, a most useful landmark and guide to the exact position of the intestine. This is especially valuable if you fail to recognize the deeper structures as they are incised, which you may easily do if the patient be muscular or fat.

I much prefer the oblique incision, as recommended by Mr. Bryant, downwards from the last rib towards the anterior superior spinous process of the ilium, and the centre of this cut, which should be made quite four inches in length, must be opposite your mark upon the crest.

When about to operate the patient should be placed upon a hard couch in the prone position, with a slight inclination towards the right side, and a hard pillow is to be adjusted under the left side, so as to render the loin tense and prominent.

I have frequently seen the operator stand behind the patient. I prefer standing in front, in which position I think you are less likely to make your deeper incisions too far forward, and so inadvertently open the peritoneum.

The structures should be very carefully divided on a director, and this should be done slowly and deliberately, waiting until bleeding be arrested, so that the anatomical relation of the parts be duly recognized as the operation proceeds. I think it very desirable, though not absolutely necessary, that the fascia lumborum should be thoroughly made out, and if possible the edge of the quadratus lumborum muscle clearly exposed. If this is seen a blunt-pointed bistoury should be passed beneath it and the muscle freely divided; when this is done the colon will be found; it is generally covered by fat, which may be mistaken for the gut, but this error will be soon discovered and is very easily rectified. It is of the utmost importance that the deeper incisions be kept the same length as the cut through the skin. If you do not attend to this rule, by the time you reach the lumbar fascia you will be working in a deep triangular hole, the apex of which is furthest from you; and it will be almost impossible to find the gut, even if you have come down upon the right spot. From personal experience, and the many operations I have seen performed by other surgeons, I am quite convinced that this is the secret of overcoming the difficulties of the operation. If the colon be

fairly exposed as I have directed, there is usually but little difficulty in recognizing it, even when it is quite undistended, and picking it up from the bottom of the wound. In most of my cases one of the longitudinal bands was clearly observed, and in others hard portions of fæces could be felt before the gut was opened.

The intestine having been found, it should be drawn well out of the wound, and opened longitudinally for a little more than an inch, the edges of the incision being stitched to the edges of the skin. The sutures should be passed through the colon before opening it, to avoid any chance of the contents running into the wound. I have found thick silk sutures answer better than wire, as they do not so easily cut their way out, and I retain them until I observe that they have begun to ulcerate through the skin; but it is better not to keep them in too long—forty-eight hours is usually sufficient.

The immediate fatality of the operation depends almost wholly upon whether the peritoneal cavity has been opened; therefore it should be remembered that it is desirable to approach and open the colon on its dorsal or even spinal aspect rather than upon its outer side.

When the intestine is collapsed I have recommended a quantity of fluid to be injected, but I must now qualify that advice and say, it is better to endeavor to distend the gut with *air* if you cannot find it without, as should you use a liquid and be so unfortunate as to open the peritoneum some will very probably run into that cavity, and certain peritonitis result; twice since I wrote the first edition of this work have I seen that accident take place.

I have on two occasions been obliged to operate

upon the ascending colon, the obstruction having been situated above the sigmoid flexure. I did not experience more than ordinary difficulty in finding the intestine, but of course the operation upon the descending colon is to be preferred on account of its being less surrounded by peritoneum, and besides this there is another reason: both my cases emaciated very rapidly indeed after the fæces began to pass through the right loin, and I am of opinion that the colon in its powers of absorption is much more important physiologically than we generally consider it; and that great loss of nourishment was sustained by these patients. I have observed the same thing in cases of fecal fistula in the groin opening into the cæcum, patients rapidly lose flesh in a manner that can only I believe be accounted for on the supposition I have stated.

If the case goes on fairly well the after-treatment is generally very simple. I usually apply a weak solution of carbolic acid to keep the part wet and deodorize, as the smell is sometimes very unpleasant.

When the bowels have been long confined before the operation, they are occasionally very difficult to get to act, and you may have to employ a scoop to remove the indurated fecal lumps; this being accomplished enemata may be used to stimulate the colon to action, and relief will be obtained.

The patient is, as a rule, able to get about in four weeks from the time of the operation.

When up they should wear a well-fitting india-rubber pad to prevent the escape of wind and motion. I now have the pad made a little hollow and fill the concavity with cotton-wool, which will absorb any slight moisture and keep the part dry. Some of my patients preferred merely a pad of wool and a napkin over it,

to any mechanical appliance. It is a great thing to cultivate the habit of getting the bowels to act the first thing in the morning; by this, incontinence and trouble during the day are best avoided.

I always recommend the use of plenty of cold water night and morning to the lumbar aperture; by which means the mucous membrane may be kept healthy and the probability of protrusion of the gut be lessened. This, however, if the patient should survive the operation for many months, is certain to occur to a greater or less extent; generally it can be returned by gentle pressure, but sometimes it can only be replaced by passing a softened bougie or thick tallow candle and carrying the bowel upwards.

Since I have employed the oblique incision, in my last eight cases, I have not found there is anything like the same tendency to a prolapse of the intestine.

Among the most distressing symptoms attending cancer of the rectum must be reckoned violent straining. I had anticipated that colotomy would have removed this cause of suffering, but that is by no means always the case. The cancerous growth, more especially when it is situated near the anus, provokes reflex action and irresistible bearing-down results; this is also the case when fecal matter accumulates below the wound in the loin, but then it may be overcome by clearing out the rectum, by injecting warm water through the wound, and also per anum.

For a detailed account of eleven of my cases of colotomy I beg to refer the reader to the "St Thomas's Hospital Reports" for the year 1870.

CHAPTER XVI.

RODENT OR LUPOID ULCER.

Although some of my critics have taken exception to the word "rodent," I cannot on reconsideration find a more appropriate appellation, unless it be "lupoid," but I think the term is not so very important. What I wish to do is to describe and define a species of ulcer of the rectum occasionally met with, which is totally distinct from simple ulcer, and in my opinion is very nearly allied to epithelial cancer, although it differs from that malady in several essential particulars, which I will presently detail.

In its early stage the ulcer is very difficult to distinguish from a syphilitic sore, and when it is situated just within the sphincter it may also readily be mistaken for the ordinary painful rectal ulcer. Rodent ulcer in the rectum differs from the malady of the same name found on the face in being as a rule most terribly painful, and in having no indurated margin; it also differs in another essential and important point,—it is very much less curable; as far as I know, it is as deadly as cancer, though not so rapid in its progress. I cannot say that I ever saw a case of undoubted rodent ulcer of the rectum cured.

It is a happy thing that the disease is a most uncommon one; in my own practice I have only had six

decided cases, and I do not remember to have seen more than nine or ten in all.

Rodent or lupoid ulcer may be distinguished from cancer by the following peculiarities: it does not invade neighboring organs by infiltration, nor does it contaminate through the lymphatics; as far as I know it never forms secondary deposits, and it produces no hardness.

It differs from secondary or tertiary syphilitic ulceration in not inducing stricture of the rectum, or any submucous thickening; and this arises from its being essentially a destructive ulceration, no effort at repair which would cause permanent deposition taking place.

The appearance of the ulcer is peculiar, and there need be but little hesitation in deciding what it is when once it is fairly established; but as I have said, at first, the most experienced pathologist may be at fault.

The following are the characteristics of the sore: the shape is usually irregular; I have only once seen it quite circular and symmetrical; this occurred in a case I shall presently relate. Its edges are sharp and cleanly cut; it does not undermine the mucous membrane; it destroys completely as far as it extends; neither its edge nor its base are at all hard, and the mucous membrane around it is perfectly, and I may say abruptly healthy. Its surface is very red and mostly dry; there is scarcely ever any amount of discharge from it. It sometimes destroys deeply, but its tendency is to spread superficially, and to attack mucous membrane rather than skin, though in the cases I have observed it invaded the border-land between mucous membrane and skin, and may spread even to a considerable distance on the latter. It often, for a time, remains stationary, and I have noticed repair taking place very rapidly;

but just as you think cicatrization will be completed, all the granulations will melt away, like snow before the sun, and the ulcer will appear in its former shape and character in the course of a few hours.

The patients attacked by this disease, I think I may say, are nearly always of a markedly scrofulous diathesis.

Rodent ulcer is generally most horribly painful (I have only seen one exception to this); the sufferer describes it as a constant burning, gnawing sensation, as if a red-hot iron was applied to the part. Of course the pain is aggravated when the bowels act. Death takes place from exhaustion; the patient really appears to die from the never-ceasing suffering. Two of my cases had diarrhœa towards the termination of their lives, and this rapidly carried them off.

I have really very little to say as regards treatment; all the various sedatives will be required in their turn, and in the earlier stage I should recommend excision; not that I have much hope that you will eradicate the malady, but you will remove the pain, and for some time the sufferer will be comparatively comfortable. I should also advise destroying the ulcer with the chloride of zinc paste, the arsenite of copper, fuming nitric acid, or the actual cautery; if you can thoroughly burn out the ulcer, the patient will be very free from pain for some time; one of my patients was very much relieved for the space of three months after the use of nitric acid. I do not think colotomy would be very advantageous to these patients; there is no obstruction of the bowel, and passing of fæces but slightly aggravates the pain, which is generally continuous.

I will relate some cases of this disease which were under my care.

Mrs. H—, æt. 30, a delicate-looking, nervous, excitable woman, of strumous diathesis. She has three children, the youngest being two years of age. She has never had any miscàrriages, or any serious illness, prior to her present one, but considers herself as delicate, and suffers much from sore throat. Six months ago she was supposed to have had fissure of the rectum, and an operation was performed upon her by a very skilful surgeon, but she did not get well. She was better for a time, but the pain has returned, and she feels much as she did before being operated upon.

On examining her I found an inflamed-looking ulcer at the entrance to the anus, it was partially external, about one-third being outside, and the rest inside. It was three-quarters of an inch long by about half an inch wide; it was quite superficial, and was not at all hard. The sphincter ani was spasmodically contracted; she suffered a good deal of aching pain, worse after action, and the bowels were very confined. There was no polypus. I decided to divide the sphincter freely. My friends Dr Crosby and Mr. Shillitoe, who assisted me at the operation, were strongly of opinion that the sore was syphilitic. I have mentioned that she had sore throat, but she had no rash, and there was no history of syphilis. The uterus was found to be quite healthy. This lady's husband had not been a steady man, and therefore it was by no means certain that she had not been infected; so it was agreed that she should take the bichloride of mercury with tonics and cod-liver oil.

The operation at once relieved the pain, and she went on very satisfactorily. The wound looked healthy, granulated freely, and I saw no reason why she should not do well; but after about five weeks the sore be-

came stationary, and refused to answer to stimulating lotions; moreover, she began to suffer from her old pain, which she always described as being like "a red-hot iron applied to the part." I may say that the wound had healed up to nearly the dimensions it was when I operated. I had now pretty well made up my mind as to the character of the ulcer; so, when at the end of three months I found it still no better, but rather increasing in size, I determined to cleanly excise the whole sore. Again assisted by the same gentleman, I freely removed the ulcer, cutting wide of it, and removing the base fully down to the cellular tissue, taking, of course, nearly all one-half of the external sphincter muscle away. After this I well swabbed the wound with a strong solution of chloride of zinc. Both Dr. Crosby and Mr. Shillitoe agreed that it was impossible by the incision I had made not to have removed all the diseased parts. After this operation, for three months the patient went on well, and the sore healed up to nearly its original size, when it again halted, and the pain returned as badly as ever. My colleague, Mr. Gowlland, now saw her in consultation with me, and was very inclined to give a favorable prognosis; but, on taking the case in hand himself, he soon found that no remedy was of any avail. This lady afterwards consulted many eminent surgeons, but without deriving any benefit, and she died in about three years from the commencement of her illness.

A girl, æt. 17, who came from the country, was taken into St. Mark's Hospital under my care in the summer of 1867. She was a ruddy-complexioned, heavy, rather stupid, strumous-looking person, and we had a good deal of difficulty in extracting any infor-

mation from her. She had a sore just at the verge of the anus, towards the perinæum, and it had burrowed through into the vagina, close to the fourchette. She did not know how long it had existed. She professed to be very innocent, and strongly denied any possibility of syphilis, but she had no appearance of hymen, and her vagina was capacious. She had a superficially ulcerated throat, and some spots of a suspicious character on her head and on her body. She had no enlarged glands in her groins; she complained of a great deal of pain in the sore. I made but little doubt about its being syphilitic, and prescribed an antisyphilitic treatment; finding no improvement take place, I passed a director through the sinus and laid it open—still it did not heal. Mr. James Lane, who was then one of my colleagues, saw it and agreed with me as to its being a syphilitic sore, so I persevered with the remedies for some time longer, but it did not heal, and I began to have my suspicions that I had made an incorrect diagnosis. I then treated the ulcer freely with strong nitric acid, and for a time it greatly improved, and she suffered scarcely any pain; and then all of a sudden, without any apparent cause, the sore spread and extended up the bowel, as well as the vagina, removing the tissues rather deeply. She rapidly lost flesh, became very weak, and had almost constant pain, which was only slightly mitigated by hypodermic injections of morphia. I kept her in the hospital for a long while, but finally, at her own request, I sent her home, and I was informed that she did not live very long.

A man, æt. 42, of delicate and feeble appearance, was an out-patient of mine at St. Mark's. He had been ill for about twelve months, and had been in several

hospitals. He had ulceration of the rectum, superficial but extensive; dorsally it extended up the bowel for quite two inches, and laterally, on both sides, for about an inch; the skin externally was slightly involved; there was no constriction of the bowel, and no deposits; the sore had a very dry and red appearance; it discharged a sanious fluid, but no pus. He suffered most horribly, scarcely ever had a moment's ease, and he took all the morphia he could get. He would not come into the hospital to have anything done; all he prayed for was something to relieve his pain. I taught him to use the hypodermic syringe upon himself, and he obtained some ease from that. When he became too weak to come to the hospital I visited him at home wishing much to get a post mortem, but when he died his friends would not allow it. He died of diarrhœa; there was no evidence of any secondary deposits having taken place.

John S—, a gunner in the Royal Artillery, æt. 31, was sent to me at St. Mark's, January, 1872, from the Hospital at Shoeburyness. The history is that he has been in India for six years, and returned to England twelve months back. While in India he had diarrhœa, fever, and small-pox, but never dysentery; always enjoyed good health; he is a steady man, single, and of very good character in the army. He cannot quite assign any date to his rectal affection, but had piles in India and some operation was performed for their cure; after this he was but little troubled until a few months before he returned to this country. He has been six months in the military hospital without any improvement in his condition. He has never had syphilis, but has had gonorrhœa.

He is a middle-sized slight spare man, much marked by small-pox, aspect not very unhealthy. An examination of the chest detected dulness at the upper part of the right lung; he is rather subject to cough and there is phthisis in his family, but he has never suffered from hæmoptysis or inflammation of the lungs. On separating the buttocks a perfectly symmetrical, nearly circular sore is seen extending all round the anus; it is as large as a five-shilling piece, very superficial, with a well-defined edge; the sore discharges but little pus, is remarkably clean and red, and is covered by rather largish granulations. The anus is more patulous than natural, and the ulceration is found to extend up the bowel for fully an inch; above this the mucous membrane is quite healthy. There is not the slightest induration about the sore. The sphincter muscle is very relaxed and powerless, and the patient states that when the motions are loose he has but little control over them. There is no evidence of syphilis; he has no rash, sore throat, or enlarged glands. He does not suffer severe pain, but there is a constant burning in the part, which is aggravated by any movement and by the bowels acting. His appetite is fair; he sleeps, but his nights are disturbed not actually by acute pain, but by uneasiness and stiffness in the sore. He has been gradually losing flesh and strength.

Many eminent surgeons to whom I showed this patient directly pronounced the sore to be syphilitic, but a further investigation induced them to withdraw that opinion, and most were inclined to think that it was rodent ulcer. I inoculated the patient with the discharge from the sore, but the results of two separate operations were negative.

The treatment at first was iodide of potassium with

bark and cod-liver oil, the application of stimulant and sedative lotions to the sore. After a time, no benefit resulting, the iodide was omitted and Donovan's solution was administered: this also seemed to be of no avail.

I destroyed a portion of the ulcer with the fuming nitric acid, but no improvement took place; therefore I did not apply any escharotic to the whole sore.

This man remained in the hospital for about four months, and despite all that was done for him he got gradually worse. The pain was mitigated by sedatives, but it became more severe and almost constant; he lost flesh and strength, and the ulcer increased in size until when he left it was just three inches in diameter; and deeper than at first; it also had much extended up the rectum. He went to the Herbert Hospital at Woolwich, and I heard some months afterwards from Staff-Assistant-Surgeon Dr. E. Hopkins, under whose care he was placed, that he was rapidly retrograding.

CHAPTER XVII.

VILLOUS TUMOR—NEURALGIA—REMOVAL OF COCCYX—PROCTITIS—GONORRHŒA—VICARIOUS MENSTRUATION.

Villous Tumor.

This is a very rare but interesting disease. Mr. Quain in his work gives the details of one case, which was the only one that had fallen under his observation. I have seen three examples of this growth, two in my own practice and one in St. Mark's Hospital, under the care of my colleague Mr. Gowland. The leading symptoms are the descent of a tumor on the bowels acting or on moving about, and the very abundant discharge of a glairy mucus, resembling the albumen of an unboiled egg. This, in one of my cases and in Mr. Gowland's also, was the most prominent symptom; even when the tumor was not protruded from the anus this discharge ran away from the patient; it is evidently a very great exaggeration of the normal secretion of the mucous surface of the rectum. Blood may be lost, but that was not the case to any extent in my cases, although a large artery could be felt entering the tumor; and there was no pain experienced, only the discomfort arising from the protrusion and the constant discharge.

The tumor consists of a lobulated pulpy mass, with long villous-like processes studding its surface; it re-

sembles exactly—though the villi are very much larger—the growth of the same name found in the bladder. It is attached to the bowel by a stem, broad rather than round, and this appears to me to be more like an elongation or dragging down of the mucous and submucous tissue of the bowel than a development. The pedunele may be two or three inches in length: in my patients it was attached to the perineal surface of the bowel. When this is the case it is a practical point worth remembering, that it is possible that a pouch of peritoneum may be dragged down by the tumor into the pedicle, and if it were tied close to its origin from the bowel that membrane might be included in the ligature.

As these tumors do not exhibit any tendency to return it is better to apply the ligature rather near to the tumor—only taking care to remove the whole of it. When the pedunele is broad it is advisable to perforate it, feeling for pulsation to avoid passing the needle through a large vessel, and include it in two or three ligatures.

Both my cases occurred in women of somewhat advanced years, one being fifty-nine and the other sixty-two. They made excellent recoveries and did not suffer much pain or inconvenience after the operation. I quite agree with Mr. Quain in not considering these tumors as in any way connected with cancer.

Neuralgia of the Rectum.

I can see no reason why neuralgia should not sometimes attack the rectum as well as any other part of the body; no doubt many other affections have been

erroneously called neuralgic, and I am ready to confess that I have more than once considered pains as neuralgic which I later on discovered to originate from a lesion of structure.

Very slight erosions, or even inflammation of a spot in the rectum, may set up much pain, and at the same time be so difficult to discover as to baffle the closest and most searching investigation.

I have been in the habit of calling pain in the rectum or sphincter muscles neuralgic when I have not been able to find out the slightest lesion, sign of inflammation, or discharge of any kind, and where the pain was not aggravated by action of the bowels; this I always consider an important point in diagnosis.

In my cases the pain has been at times severe, at others absent, and only in two instances was it constant. The patients have been mostly delicate, irritable, or nervous people, who have been subject to neuralgic pains in other parts. I have noticed the attack follow direct exposure to wet and cold by sitting upon damp grass. One attack predisposes to another. Several times in private practice I have had the same patient.

Usually you will find in these cases general debility, but in addition disorders of the digestive organs; very often the liver is much affected; so it will not do to commence your treatment with tonics and antineuralgic remedies. First of all, unload and put the abdominal viscera into condition, and then quinine, iron, strychnia, and hypodermic injections of morphia may at once cure your patient. Attention to this point is all-important. In some instances, however, one has to confess to an inability to do more than temporary good: nothing appears to cure the malady.

When the pain seems quite confined to the sphincter muscle, there is always spasmodic contraction, and I believe forcible dilatation of the anus to be the best treatment; after this is done, a hypodermic injection of morphia will often cure this affection, which I used to consider a very intractable form of myalgia.

There are other nervous diseases of the rectum described by authors, but they are very rare indeed; one of them, which is called "irritable rectum," I think is really the result of a chronic inflammation of the mucous membrane, as in such cases I have observed much heat in the bowel, and tenesmus as well as a discharge of mucus.

Removal of Coccyx.

I have seen many female patients suffering from what has been considered neuralgic pain in the rectum, but really the pain was most distinctly referable to the sacro-coccygeal joint. These are most intractable cases, and on two occasions I have removed the coccyx in the hope of curing the disease, which was wearing out the mind and body of the patients.

My first case was a married woman, æt. 54, with seven children. She had for years been complaining of pain in the rectum and at the end of the spine, which rendered her quite incapable of performing her household duties. She could not sit down except on a ring-shaped air-cushion, and when from home she always wore under her dress a couple of pads to catch the buttocks, so that the end of the spine should not touch anything.

If the bowels were confined, she had great pain before and at the time of their acting rather than after-

wards. If she stooped and suddenly raised herself, the pain "was like a knife going through the very bottom of the back." She could walk but a short distance, and going up stairs was a very painful exertion to her.

On examining the rectum, no fissure or ulcer was discoverable, but when the finger was pressed on the coccyx so as to move it—and it moved exceedingly freely and easily—she complained most bitterly.

As nothing I could do seemed to benefit her, and she had been under many eminent physicians and surgeons without getting better, I determined to remove the coccygeal bone at the joint; and this I did. Making a straight vertical incision along the bone, and taking care not to wound the rectum, I dissected it out and disarticulated it without any difficulty. There did not appear to be any appreciable pathological change in the bone. The wound healed rapidly, and I was much pleased to find that the patient was cured. She is now able, nine months after the operation, to sit down in comfort, and can walk about without any pain.

Encouraged by this success, I operated some months back in a very similar case at St. Mark's Hospital. The patient was an unmarried woman, 32 years of age, who had been for years suffering from pains in the rectum and end of the spine. Her symptoms were almost precisely like those I have described, and there was no lesion in the bowel, but she had an intussusception, not to any great extent, of the rectum. This made me less sanguine of success, but as the pain was undoubtedly sacro-coccygeal, I removed the bone, and the wound healed well. Although she is not perfectly free from pain, she can sit down in comfort, which she

could not do at all before, and in many other respects she is improved.

I by no means intend to advocate the frequent removal of the coccyx for pains in the neighborhood of that bone, yet I think in some cases, where all other means have been exhausted, and there is good evidence that the pain is induced by every movement of the bone, its excision is called for, and may be the means of curing an otherwise incurable disease. I do not see any particular danger in the operation, and that the coccyx may be dispensed with is, I think, certain.

INFLAMMATION OF THE RECTUM may occur in both a chronic and acute form. The chronic variety obtains in old people. The symptoms are a sensation of heat and fulness in the rectum, frequent desire to go to stool, and great tenesmus; there may be a discharge of blood and mucus. With these symptoms you would suspect impaction, but a digital examination will settle that point. Injections of starch and opium are very beneficial, but I think in the aged the most efficient medicines are turpentine, aloes, confection of black pepper and copaiba. I usually order frequent and small doses of Barbadoes aloes; it acts as a stimulant to the rectum, induces a healthy action, and very soon the disorder subsides.

Acute inflammation of the rectum resembles dysentery in its symptoms, but is distinguished from it by the absence of abdominal pain or tenderness and severe constitutional disturbance; the pain is generally confined to the sacrum and perinæum; the bladder is often sympathetically affected, and there is not infrequently difficulty in passing water.

It is not my intention to enter upon the subject of syphilitic affections of the anus; they are very common, particularly in hospital practice, as want of cleanliness is one of the most potent causes of them, but they are fully treated in most works on surgery, and therefore there is no necessity for me to discuss them.

I am happy to say that I have seen very few cases of *primary* syphilitic disease of the rectum.

I have had under my care three cases of undoubted GONORRHŒA OF THE RECTUM. There was great heat and burning pain experienced, with a copious discharge of pure pus; the mucous membrane, as seen through the speculum, was intensely inflamed; the cases occurred in prostitutes, who all confessed the manner in which they became so affected. The cure was not difficult; lead lotion and opium was used in two cases, and answered very well, the third was cured by sulphate of zinc and warm water injections three times daily; in neither case was there any ulceration of the lining membrane of the bowel, nor did any thickening or contraction result; the inflammation did not appear to affect the submucous areolar tissue.

I have observed three cases of VICARIOUS MENSTRUATION from the rectum; they are interesting from a physiological point of view. I will therefore relate one; no particular treatment was adopted, nor did it seem called for.

Eliza W—, æt. 44, married, and had four children; always fair health; twelve months ago she nearly ceased menstruating, and has only had an occasional scanty discharge since; for six or seven months she

has been subject to bad headaches. On the 4th of April of this year (that was 1865), after her bowels acted, she had a very free discharge of blood from the rectum; this continued for three days and then ceased; she lost a considerable quantity of blood, and her head was greatly relieved. When I saw her there had been several repetitions of the bleeding, coming on every two, three, or four weeks; it not only passed at the time of the bowel acting, but oozed away all the day from the anus, so that she had to wear a napkin; the second time I saw her the blood was passing, and I gave her an injection and most carefully examined the bowel; I could not find any hæmorrhoids, ulcer or specially vascular spot. I examined the uterus, both digitally and with a speculum; it was healthy, and there was no discharge of any kind; the blood passed per anum was quite florid and pure, unmixed with any mucus or pus. I only ordered her a "placebo" and kept her under observation. For thirteen months this discharge of blood came on about every three weeks, almost as regularly as her period of menstruation used to do; it continued for four days; at the end of thirteen months it gradually became less frequent and finally ceased. Her health all the while was good. I many times examined the rectum, but could never find any unhealthy appearance.

My other two cases were similar to the one I have detailed, but not quite so well marked.